



The DATA CAPTURE Report

Since 1977, the
premiere management
& marketing newsletter
of automatic data
capture: Bar Coding,
RF and related
technologies

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May 10, 1996

DID YOU KNOW?

EDI - THE FUTURE IS NOW

In a recent survey of wholesale/retail businesses, 53% anticipate implementing EDI (Electronic Data Interchange) this year. For many, this is the first step toward EC (Electronic Commerce).

This trend escalated recently when several large trading partners mandated that their supply-chain vendors incorporate advanced transaction sets in order to continue doing business with them.

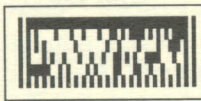
In response to this "continued, phenomenal growth in electronic commerce" Macola Software (Marion, OH, PH (614) 382-5999, FX (614) 382-0239) recently acquired the employees and offices of SUMA Computer Systems, Inc., (Reynoldsburg, OH) to offer electronic commerce software.

Macola specializes in the development of high-end accounting, distribution and manufacturing software for PCs and LAN environments. They have worldwide installations of nearly 15,000 sites with more than 145,000 users, in 30 countries.



NEW SYMBOLOGY ANNOUNCED

Zebra Technologies announced a new linear matrix symbology. Ultracode™ combines aspects of both linear bar code and matrix symbologies.



(See story on pg. 4.)



TRIVIA QUESTION

Who invented the bar code?
(For the answer, see pg. 2)



Electronic Commerce Continues to Gain Momentum

-by George Goldberg

The growing importance of electronic data interchange (EDI) has prompted the startup of a new trade show. *EDI World* magazine recently announced that it will sponsor the first Electronic Commerce World technology conference September 9-12 in Columbus, Ohio. The conference sponsors have scheduled 110 educational programs (featuring all of the EC technologies) and anticipate 200 vendor exhibitors and 3,000 visitors.

The term "EDI" now defines the "electronic marketplace" too narrowly. EDI had its origins in the need for the advance transmission of data between product manufacturers and their customers and vendors; i.e., purchase orders, shipping advices, manifests and remittance advices. The broader term, "Electronic Commerce" (EC) — which has now taken over — includes a wider range of EDI-related activities covering financial, healthcare, insurance and government applications. According to *EDI World* publisher Dick D'Alessandro: "I now look at EDI as a subset of electronic commerce. EC includes document imaging, E-mail, and even ADC technologies such as bar coding. More and more of these technologies are working together."

D'Alessandro denies that he will be competing directly with another existing conference — the nine-year old EC/EDI show sponsored by the Data Interchange Standards Association (DISA) — but there is every indication that the two events will be covering the same market. "I offered this [EC World] show to DISA last year when I couldn't afford to do it myself," he explained, "and they turned it down. This year, I told them I was prepared to go ahead on my own."

A DISA spokesman — who did not want to be identified — told SCAN: "We are not happy about the introduction of D'Alessandro's EC World show. I believe it will be competitive to ours. We have also expanded beyond just EDI and will cover all of the EC technologies. In the past, we worked closely with *EDI World* to publicize their magazine and our show. This is our area of expertise. Nobody can put on an EDI show as well as we can." DISA's EC/EDI show was held April 1-3 in New Orleans.

Another addition to the dissemination of electric commerce information is: E-COMM — The Magazine for Electronic Business and Technical Data Exchange.

The first issue of this bi-monthly was September-October 1995. Publisher William Sleight welcomed his readers to the "evolving and converging technologies" of electronic commerce. "They include," he wrote, "EDI, the Internet, E-Mail, Groupware, Workflow, SGN/HTML, EDMS/PDM, CALS, PDES/STEP and others." [He does not define — and we are not yet ready to decipher — all of those casually-dropped, alphabet-soup acronyms.]

In its latest (March-April 1996) issue, the lead story is "Secure Electronic Commerce" which explores "one potential downside of electronic commerce: the security risks inherent in its systems and infrastructure."

For more information:

Electronic Commerce World technology conference:
PH 800/248-2317; 102365,534@compuserve.com.

E-COMM Magazine: 408/867-6300;
publisher@ecommmagazine.com.



Who Invented the Bar Code?

-by George Goldberg

An obscure obituary carried by the wire services in late October reopened the historical debate about the origins of bar coding.

As printed in *The Washington Post* (11/4/95): "Raymond W. Hoecker, 82, the man behind the Universal Product Code, the bar of thick and thin lines read by an electronic scanner for merchandise pricing, died October 29, in Springfield, MO. Mr. Hoecker taught marketing at the University of Maryland before his 28 years with the U.S. Department of Agriculture His idea for a universal code scanning system in 1968, which began as a round symbol with lines radiating from the center, begat the modern rectangular UPC used today at nearly every cash register in the United States."

To verify these claims, we forwarded this notice to Ben Nelson, who retired last year after 42 years with Markem (SCAN Aug 95). Since then, Nelson has been collecting massive amounts of data on the origins and development of bar coding for a book with the working title "The History of the Auto ID Industry." "Who is Hoecker," we asked Nelson, "and why haven't we heard of him before?"

Nelson contacted former IBM engineer George Laurer, who Nelson describes as "the real inventor of the UPC symbol." Laurer retired in 1987 after 37 years with IBM and now lives in Wendell, North Carolina. Back in 1972, Laurer developed the UPC design that IBM submitted when the Ad Hoc Committee of the Uniform Code Council was searching for a system to automate retail checkout. The UCC received many design submissions that year, including a round target of concentric cir-

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- Magnetic stripe
- OCR products
- Voice recognition systems
- Vision systems, video scanners
- EDI
- Smart cards & optical cards
- Memory tags
- Biometrics
- Application software
- Peripherals or supplies for the above

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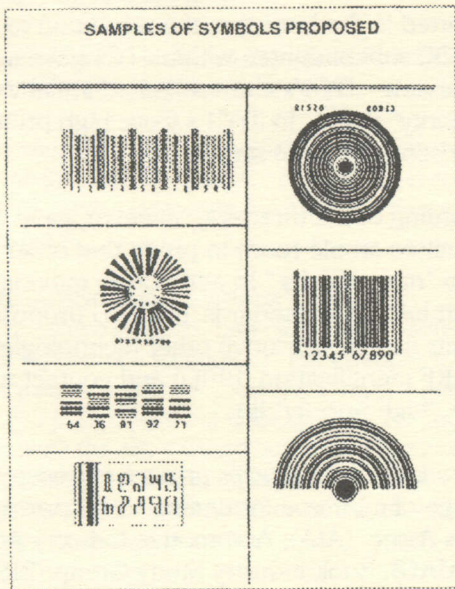
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cles, a circular symbol with spokes, OCR characters, and others (see below). The Laurer/IBM design won out.

In a recent interview with the *Durham (NC) Herald-Sun*, Laurer recounted his 1972 experience. "It [the UPC symbol developed at IBM] is the one we are now using," he said. "Absolutely. If you look at the creation I came up with, I think the only difference is the type font of the numbers down at the bottom."

The chosen UPC symbol was immediately placed in the public domain — at the very wise insistence of the UCC. Neither IBM nor Laurer ever received any royalties for his design.



Courtesy of "The Bar Code Book" by Roger Palmer, published by Helmers Publishing, Inc.

As for the Hoecker story, Laurer reported that Hoecker's son had called him recently to apologize for "any misrepresentations" that were made about his father in the obituary. The son explained that the family "had not given that information to the press." Although Hoecker had worked with bar codes at the Department of Agriculture, he had not claimed any responsibility for its invention.

Meanwhile, Nelson is nearing completion of his book. "I hope to have the final manuscript by July," he told SCAN/DCR. "The first part of the book will cover the history of the auto ID industry. The second half will describe all of the bar code symbologies I have uncovered so far. I have already included 254 different designs from all over the world."

Nelson is currently seeking a publisher for his book which he hopes to have printed and ready for distribution at SCAN-TECH 96.

Scanners Deliver Accuracy, Not Honesty

-by George Goldberg

Gathering scanning data at retail point-of-sale does not always yield the anticipated dependable results.

Five years ago, UPC scanning was successfully introduced into the pre-recorded music industry by Soundscan (Hartsdale, NY). The new application revolutionized the important weekly listings of the best-selling records, tapes, albums and CDs (SCAN Oct 91). As described in a *New York Times* article (1/25/96): "Until 1991, the pop music charts were notoriously unreliable. Paying off record store employees with free albums, concert tickets and even vacations and washing machines was the standard music-business method of manipulating record sales figures."

Soundscan's new system tracks the purchases of pop music by analyzing the UPC-tallied sales of each record as compiled by all of the large retail chains and selected independents. The result has been the elimination of the payoffs and the restoration of general trust in the reliability of the published "charts."

But the stakes are very high in the recording industry and those with vested interests continued to search for ways to circumvent the system. The *Times* reported: "The more the industry relies on Soundscan's numbers, the more record labels have to gain by artificially inflating them. The easiest way to do this is to concentrate on independent retailers....Records sold by the independents are weighted to account for the [independent] retailers that do not report to Soundscan."

One of the unethical methods devised by record manufacturers — to multiply sales reported by the independent retailers on Soundscan's panel — is to supply stores with large quantities of free records (singles) to put on sale at very low, almost giveaway, prices. Small store owners and managers were even encouraged to inflate sales by repetitive scanning of labels whether or not the items were actually sold. Instances were also discovered where bar codes were switched so that the sales of older albums were reported as newer releases.

Although Soundscan claims to have installed safeguards against such cheating and can isolate some of the fraud, there is general agreement that all of the holes cannot be plugged.

The moral of this tale: UPC/EAN scanning is fast and accurate, but it does not make honest people out of crooks.

New Linear Matrix Symbology Announced

-by Bert Moore

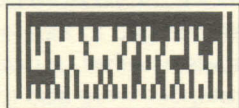
Zebra Technologies, Inc. has announced a new symbology designed to readily encode all natural languages and be printable with relatively crude printing methods. Ultracode™ is a "linear matrix" symbology — combining aspects of both linear bar code and matrix symbologies.

Rather than the varying-width bars and spaces used by bar codes, Ultracode uses six element-high rows of no required width, much like matrix symbologies. Specific patterns of color transitions within the rows are used to encode data. Like other matrix symbologies, Ultracode also offers selectable levels of Reed-Solomon error detection and erasure correction.

When printed, Ultracode symbols more closely resemble linear bar code symbols, complete with start and stop patterns. Ultracode symbols can be printed singly or grouped (even stacked). Compared to matrix symbologies, Ultracode's overhead is minimal (depending on the level of erasure correction selected).

Ultracode goes one step further than existing matrix symbologies, however. Efficient encodation of ideographic (e.g., Chinese) and mixed (e.g., Japanese, Kanji and phoenetic alphabets) languages has been a problem for most symbologies. Ultracode was designed to implement ISO 10646-1 "Universal Multiple Octet Coded Character Set Specification" for encodation of "all natural alphabetic, ideographic, and mixed languages." Ultracode's implementation of this standard facilitates encodation of every language and even switching between alphabets within the same symbol.

The other unusual feature of Ultracode is that it's designed to be printable with techniques as basic as stenciling or as advanced as color ink jet. Four-color Ultracode symbols require about half the space of black and white symbols.



Although an official specification is still under development, Zebra intends to place the symbology in the public domain and submit it to AIM International for consideration as an International Symbology Specification (ISS).

For further information, contact:
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PH (847) 913-2270, FX (847) 913-2274
E-mail: cphohber@zebra.com.



Update on Last Week's JTC1 Meeting

-by Bert Moore

(Pittsburgh, PA) The first, official open-forum opportunity for the ADC community to actively direct the scope and direction of international standards was, by any measure, a success. Representatives of 50 different industry associations, educational and governmental agencies, and ADC users and vendors attended the first meeting of the U.S. Technical Advisory Group (TAG) for Joint Technical Committee 1 (JTC1) Subcommittee 31 (SC31).

As reported in the last issue, the resolution to create an ADC subcommittee within JTC1 gave it a broad purview. JTC1's charter limited initial work to "high priority" items. In JTC1's view, high priority meant existing bar code standards.

The wording of the directive, however, gave the subcommittee ample room to prove that other issues were also "high priority." In addition to moving forward with bar code standards, the TAG proposed work items that would move other technologies (such as RF identification [RFID] and contact memory) to the "high priority" list.


Organizations and agencies present represented a wide range of interests. Attending were: Aerospace Industries Assoc. (AIA), Automotive Industry Action Group (AIAG), Book Industry Study Group (BISG), International Card Manufacturers Assoc. (ICMA), Department of Defense (DoD), Defense Logistics Agency (DLA), Food Marketing Institute (FMI), Navy Supply (NavSupSysCom), University of Pittsburgh, U.S. Navy, and U.S. Air Force. AIM USA, AIM International, and the Uniform Code Council (UCC) were also represented.

Recommendations from the US TAG will be presented to SC31 at its first meeting in Brussels in June 1996. Recommendations from other national TAGs will also be presented. From these recommendations, SC31 will develop a proposed program of work to present to JTC1 in December 1996. Once work items are approved by JTC1, the real work can begin.

Task Groups (TG) for approved work items will be formed on the national level — this is where companies and individuals can help determine the U.S. position and work on draft documents.

If you want to get involved with the TAG or a TG, contact AIM USA at:
Pittsburgh, PA, PH (412) 963-8588,
FX (412) 963-8753, E-mail: adc@aimusa.org.

Comment . . .

One significant issue decided at the meeting was that data content was not within the committee's purview. This removes the basic structure of the UCC/EAN system from an arena where it could be modified or amended by outside interests. (UCC/EAN application standards — see side-bar — will be moved forward within JTC1/SC31 or other appropriate subcommittees.) Although we won't know the final decision until SC31 meets in June, this decision would protect companies using UCC/EAN item ID standards and, at the same time, remove a potential roadblock to the development of successful international standards. 

WHAT IS A STANDARD?

Here's a quick primer on the types of standards you may encounter and what they cover.

Whether the standard is issued by an organization such as the Uniform Code Council (UCC), is recognized by ANSI, or is a corporate standard, the concepts are the same.

* Technical Specifications

As the name suggests, these documents define one or more aspects of a technology. For example, a bar code specification would tell you everything you need to know to print a legal bar code symbol. For radio frequency ID (RFID), it would cover communication protocols, frequencies, and other fundamentals. Typically, these specifications do not address the use of the technology or message content.

* Coding Standards

These standards are high-level standards or conventions that govern some aspects of content. Examples would be the ANSI MH10.8.2 data application identification standard and the American Banking Association system for identifying financial institutions (used on your credit cards). Coding standards tell us how the data is structured or what it means. Usually, these standards are independent of technology and application.

* Application Standards

This is where it all comes together. Application standards these days typically reference existing, high-level technical specifications and coding standards. Application standards define the technology used, establish physical parameters, and specify which coding standards should be used.

For example, MH10.8M is an application standard covering bar code shipping container labels. It identifies symbologies; defines symbol size ranges, label size and layout; and provides other guidance on how to use the technology and coding for shipping labels. It references two technical specifications (Code 39 and UCC/EAN-128) as well as three coding standards (ANSI MH10.8.2 data application identifiers, the UCC vendor identification number, and the D-U-N-S company identification number).

ADC Application Grabs National Media Attention

-by Rick Morgan

Radio frequency technology is getting major coverage from the cable television industry and the national news media, thanks to a new product from RF Technologies, Inc. (Brookfield, WI, PH (414) 790-1771, FX (414) 790-1784). The product, Code Alert, is an infant and child security system designed to stop the abduction of infant children from healthcare facilities.

Although the product has been on the market for about a year, it has just recently captured the attention of such media giants as *USA TODAY*, the CBS television news show "Extra," and ABC's "Day & Date." A VAR for the product was featured on the NBC "Today" show and the system was also featured on "Home & Family" on the Family Channel network, twice on the CNBC network's "Steals & Deals," and a number of local television stations.

An abduction Oct. 23, 1995 of a 12-hour-old baby led Houston's Memorial Hospital Southwest to install a \$70,000 radio frequency security system. Catavia Nicole Thomas was taken by a woman posing as a student who helps new mothers care for babies. Diana Lynette Wilson, 26, spent seven hours by the bedside of new mother Brenda Thomas. A hospital camera recorded her taking the child when Thomas went to the bathroom. Wilson was captured when she showed up at the home of a friend that day and the baby was returned unharmed. This incident and others like it drew the attention of the national media to the new radio frequency system.

The system works by attaching an "active" tag to an infant's ankle. The tag is considered active because it contains a battery-powered transmitter that sends messages to nurse's stations and can activate security systems in the hospital. In the most elaborate systems; doors lock, elevators stop, and alarms sound whenever an infant passes through a doorway or elevator opening without proper identification. Unlike the over-the-counter systems sold in drug stores, the system cannot be disconnected or removed (i.e., Cutting the tag with scissors) from the infant without setting off the alarm. This is an important feature of radio frequency and distinguishes it as a superior technology.

There have been 89 abductions of infants, six months and younger, from healthcare facilities since 1983. (Source: "The National Center for Missing and Exploited Children"- Arlington, VA) "This averages out to about six or seven abductions per year," said John Hickey, vp of sales and marketing.

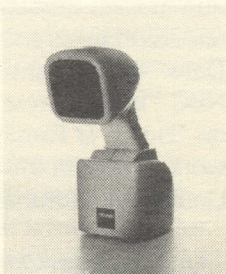
The company has sold over 100 systems priced at \$20,000 and up, in the past year. "Obviously, it costs more to install a system in the Cleveland Clinic than in a small-town hospital," said Hickey. "So the price can vary quite a bit. But it is a great system that offers many other possible applications. We anticipate it will be one of our best sellers."



PRODUCTS

OMNI-DIRECTIONAL, HAND-HELD SCANNER MAKES DEBUT...

Those of you who are heading for the ID Expo in Chicago (May 14-16) will want to take a look at the MS6720, a hand-held, omni-directional scanner being introduced by Metrologic Instruments, Inc. (Blackwood, NJ, PH (609) 374-5506, FX (609) 228-6673). For years, end-users and VARs have been asking for a hand-held scanner with omni-directional capabilities and this new addition to the data capture industry could solve their problems.



According to Kevin Woznicki, director of marketing for the company, Metrologic engineers went to over 100 VARs and end-users to find out exactly what had to be done to meet their needs. Those questioned actually helped in the development of the product.

A fixed-mount stand is included with the new scanner. The stand allows the user eight swivel positions and 10 fixed positions to choose from as well as the freedom of a hand-held unit.

"Other companies have scanners that can be removed from the mounts but nobody to my knowledge has an omni-directional product with a true handle that feels comfortable when you hold it," said Woznicki. "And, the product does 1000 scan lines per second, which is similar to our other units."

Applications for the product are:

- Retail-POS, inventory and data collection
- Healthcare-hospitals, pharmaceuticals, manufacturers
- Professional services, financial, legal, accounting
- Order entry and processing
- Work-in-process
- Time and attendance

Those wishing to preview the new product may do so at Booth #659 at ID Expo.



APPLICATIONS

BAR CODES PREVENT ACCIDENTAL AIDS INFECTION

The Mayo Clinic is using a bar code printer to help prevent accidental transmission of AIDS because of improper test tube labeling. Monarch Marking Systems Product Manager Linda Delaney says the Clinic is using their Pathfinder Ultra bar code printer. Prior to the system's use, three people were accidentally infected with AIDS at the Clinic. Delaney explains a radiology lab uses the printer for bar coding test tubes when labeling and tracking patients' blood. The bar codes allow the user to check, validate and record all blood transfers between test tubes, syringes and patients. Delaney says the system meets and exceeds the Center for Disease Control (CDC) recommendations for proper blood handling procedures. (Monarch Marking Systems, Dayton, OH, PH (513) 865-2769, FX (513) 865-2073).



SONAR ELIMINATES MISREADS WITH SCANNERS WORKING IN TANDEM

Sonar technology is being used in conjunction with laser bar code readers to improve package scanning for a major mail order/distribution company in Maine. In preparation for shipment, their packages travel side by side on a high-speed conveyor belt. Frank Goodfinger, vice president of strategic partnerships of Computer Identics, says previously, omni-directional scanners were located above each side of the belt. Often the beams would overlap, causing them to miss their intended package and instead scan the "wrong" box - the one on the other side of the conveyor belt. Now, sonar has been built into the scanning system. The sonar determines package size, distance away from the scanner and location on the conveyor belt. This information allows the scanners to read bar codes only on packages passing beneath them. (Computer Identics, Canton, MA, PH (617) 821-0830, FX (617) 828-8942).



BAR CODE TRUANT OFFICER

High school students' attendance is being tracked using bar codes and hand-held laser scanners. John Phyle with Universal Data Incorporated says everyday, teachers indicate on pre-bar coded roster sheets whether a student is absent or tardy by putting a mark next to the appropriate bar code. A hall monitor scans the roster sheets hanging outside each classroom. The information is stored in the hand-held scanner and later uploaded into a central computer for record keeping. (Universal Data Incorporated, Clarkston, MI, PH (810) 620-6677, FX (810) 625-6677).



OCR PROTECTS DOUBLOONS

The rare coin industry is using OCR to label packages of expensive coins, some worth as much as \$250,000, sent secretly through the mail. Caere Corporation Marketing Manager Andrew Allansmith says by using OCR characters on the packages of coins, the sender has increased theft-security during shipping. Sensitive information listed as OCR characters, such as package content and value, is known only to the sender and receiver. Allansmith says, some of the OCR characters on the package are human readable and can be used when tracking shipments. (Caere Corporation, Los Gatos, CA, PH (800) 543-0334, FX (408) 395-7130)

**BIOMETRICS SHORTENS QUEUES AT AIRPORTS**

Helen Thomas with Recognition Systems says airports around the world are using biometrics to alleviate customs lines for frequent international fliers. The Immigration and Naturalization Service offers a program called INSPASS at airports like New York, Newark and Toronto. Thomas says people traveling in or out of the country more than three times a year get a plastic card encoded with their hand geometry. At the port of entry, the traveler inserts the card into a kiosk and places their hand on Recognition's ID3D Handkey unit. Confirmation of identity triggers a gate to open, which allows the user to enter the country, avoiding long lines. (Recognition Systems, Campbell, CA, PH (408) 364-6960, FX (408) 370-3679)

**LAMINATE INCREASES CARD LIFE**

FARGO Electronics this spring introduced a durable laminate for magstripe ID cards which increases card life from a few hundred swipes to 50,000 swipes. Stan Opstad, product manager for FARGO Electronics, says the laminate protects the card from dye-migration, abrasion, and ultraviolet fading. Opstad explains users include universities with access control and meal plan systems that require cards to last four years. "We also see a demand for driver's licenses and national ID programs." (FARGO Electronics, Eden Prairie, MN, PH (612) 941-9470, FX (612) 941-9470)

**SCANNING GRAPES**

OCR readers from Caere Corporation are helping an end-user avoid touching a computer keyboard when shipping pallets of table grapes. This saves time and prevents human keystroke errors. In the

past, workers used a complex database with menu commands for customer routing, grading, etc. Workers had to take the time to physically type in commands and risked hitting the wrong key or typing the wrong command. Caere Marketing Manager Andrew Allansmith says now, the client scans a menu sheet encoded with OCR characters which represent particular keystrokes and sets of keystrokes. Using small OCR marks, all of the menu commands fit on a single, laminated sheet of paper. (Caere Corporation, Los Gatos, CA, PH (800) 543-0334, FX (408) 395-7130)

**FINANCIAL NEWS****PEAK: SALES UP, PROFITS UP**

The Peak Technologies Group, Inc., New York, NY, (NASDAQ: PEAK) recently announced that revenues for the first quarter ended March 31, 1996 increased to \$49.2 million versus \$43.4 million for the first quarter ended March 31, 1995.

In the first quarter of 1996, net income increased 89% to \$1.8 million, or \$0.20 per share, compared to \$951,000, or \$0.13 per share, in the first quarter of 1995, after the one-time merger charge of \$470,000 related to the acquisition of IPPC in the first quarter of 1995. For the quarter, there were 9.2 million weighted average shares outstanding compared to 7.6 million last year.

Commenting on these results, Nicholas R. Toms, Peak Chairman and CEO, stated, "Generally, the first quarter is the softest of the year for sales and SG&A (selling, general & administrative) expenses relative to sales are at their highest for the year in this period. Sales of software, professional services, equipment, consumables and maintenance services as well as significant increases in the sale of Peak proprietary software resulted in further sequential gross profit margin improvement."

"For the quarter, gross profit margin reached 35.7% of sales compared to 32.0% in the first quarter of 1995, and 35.0% in the fourth quarter of 1995," he continues. "At the end of the quarter, we continued both our US domestic and our European expansion with modest acquisitions of Syntest in New England, Acquadata in France, and Combitrading in Holland, none of which are expected to be dilutive to earnings per share in 1996."

SCAN/DCR: How have you financed your acquisitions?

Toms: Stock offerings, borrowed money, or internally, generated funds ... a combination of all three. Since 1991, we've grown at a rate of about 39% per year. About half has been internal growth and the remainder has been acquisition related.

SCAN/DCR: What is the breakdown of your sales with respect to VARs/end-users?

Toms: About 75% of our sales are to end-users and the remaining 25% is through VARs.

SCAN/DCR: Do your VARs feel you are competing with them?

Toms: We have a completely separate channel with its own sales staff and support group called AccuScan (Worldwide headquarters - Atlanta, GA - European headquarters - Paris, France). They sell exclusively to VARs. And, some of our software products are only available through our reseller network.

Peak is the brand name we use for our customers who are end-users. The sales force selling to VARs is not permitted to sell to end-users and vice versa, so we get very little channel conflict.

SCAN/DCR: How do last year's results compare to previous years?

Toms: For the last nine quarters, every quarter has been more profitable than the same period the year before. Three years ago, our earnings were \$0.41 per share (1993). In 1994, our EPS was \$0.71. Last year, it was \$0.94. Expected EPS for this year is between \$1.15 and \$1.22.

The Peak Technologies Group, Inc. is the largest systems integrator and full-service value-added dis-

tributor of bar code based data capture and wireless data transmission systems, and related services and supplies.



SCANSOURCE NET SALES INCREASE 61% TO 14.4 MILLION

ScanSource, Inc., Greenville, SC, (NASDAQ: SCSC) recently announced financial results for the quarter ended March 31, 1996.

The Company realized net sales of \$14.4 million for the quarter ended, compared to \$8.9 million for the quarter ended March 31, 1995.

"The addition of our California sales office has allowed us to expand our customer base on the west coast, contributing to our sales growth," said Mike Baur, ScanSource President.

Pre-tax income from operating activities without nonrecurring income was \$804,000 for the quarter ended March 31, 1996, compared to \$398,000 for the same period in 1995.

The after tax income from operating activities without nonrecurring income for those periods was \$489,000 and \$239,000 respectively.

Earnings per share without nonrecurring income for the quarters ended March 31, 1996 and 1995 was \$0.13 and \$0.09 per share, respectively.

"ScanSource continues to benefit from overall industry growth in both the bar code and point-of-sale markets," Baur commented.



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