DID YOU KNOW?

CONSUMABLES LEAD WAY IN 20.1 PERCENT NORTH AMERICAN BAR CODE REVENUE GROWTH

According to the **Venture Development Group**, global bar code equipment vendor revenues from the sale of bar code products and services in North America grew 20.1% from 1994 to 1995, based on a supply-side review of bar code vendor sales to North American accounts.
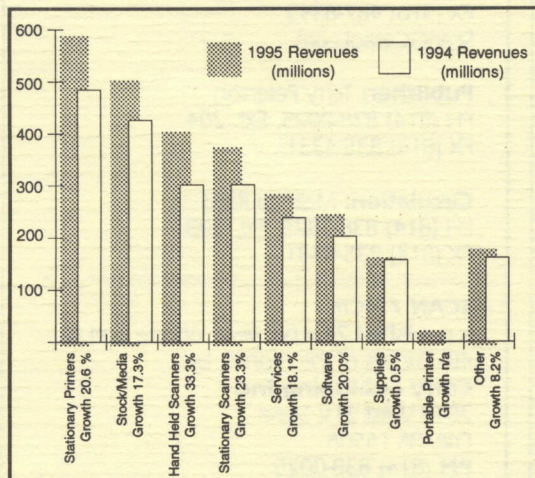
Consumables, including media and supplies, continue to account for the largest share of bar code product/service revenues in North America.

The North American market for bar code products and services will continue to grow, although perhaps at slightly lower than historical growth rates.

For more information: **Venture Development Corporation**, Natick, MA, PH (508) 653-9000, FX (508) 653-9836, E-mail: vdc4u@aol.com. SCAN

Will Management Change At Advanstar Affect ID Expo?

By George Goldberg

When **Advanstar Communications** was bought by investment bankers **Hellman and Friedman Capital Partners** earlier this year (*SCAN/DCR 4/26/96*), one of the questions raised was whether the new owners would retain the same high level of interest and involvement in the automatic data capture industry.

Among the 109 business magazines, trade journals, expositions and conferences owned and managed by Advanstar, there are a number of important ADC properties: *Automatic ID News* magazine (including its three international editions); **ID Expo**, **SCANTECH/Europe** and **SCANTECH/UK** trade shows; and the ID Info conferences. Following the announcement of the change in ownership, Bill Windsor, president of the Advanstar Expositions division, made it clear that his company was very pleased with its properties related to ADC technology and would continue its interest in expanding its role in this industry.

On July 8, Advanstar brought in a new management team for the parent company. Robert Krakoff was appointed chairman/CEO and Jim Alic vice chairman of Advanstar Communications. Both Krakoff and Alic had worked together as senior executives at **Reed Elsevier** (the giant publishing/show management competitor of Advanstar) which now owns the **SCAN-TECH/US** trade show.

On July 31, it was announced that Bill Windsor had left Advanstar "to pursue another opportunity in the exposition industry" and that Jim Alic has assumed the additional responsibility of acting president of Advanstar Expositions.

Windsor is starting his own new company which is also devoted to trade magazines and expositions. His partner will be **Bain Capital**, a Boston-based private equity investment firm, which will provide the financing. Windsor is currently seeking acquisitions or new startup opportunities. Is he interested in properties in the ADC field? "I have no restrictions on any of my activities," he

told *SCAN/DCR*, "and although I am interested in automatic data capture, I have no immediate opportunities in this area."

Windsor had been a key player in the decision, last February, to move ID Expo out of Chicago starting in 1997. In response to the growing antipathy of the ADC vendors to having both SCAN-TECH and ID Expo in Chicago each year, Windsor had indicated readiness to work out an alternative schedule. He was frustrated, however, by the anti-trust laws which did not permit any direct negotiations with SCAN-TECH's owners, Reed Exhibitions and Advanstar was forced to unilaterally relocate its ID Expo show.

We were not able to reach Jim Alic at press time to determine whether his additional title as "acting" president of Advanstar Exhibitions implies that he will only be filling that position temporarily until a replacement is found. There are no indications from within the company that the departure of Bill Windsor suggests any diminished interest by Advanstar in aggressively pursuing all of its ADC publications, shows and conferences. SCAN

New President At PSC... How Will He Shape Its Future?

The purchase of **Spectra-Physics Scanning Systems** by **PSC Inc.** is now complete [at a purchase price of nearly $140 million] and John O'Brien [former president of Spectra-Physics] has been moved into the president's position at PSC Inc. L. Michael Hone retains his position as chairman and CEO of PSC.

We contacted Stuart Itkin, PSC vice president of worldwide marketing, to discover how the new management structure will function. "Both men are capable executives," said Itkin. "Spectra-Physics has annual sales over $115 million and PSC's sales should reach $87.5 million this year. Neither man is a stranger to overseeing the operations of a large company.

"Effective immediately, O'Brien will take charge of all day-to-day operations including those at: PSC Inc. - Webster, NY; Spectra-Physics Scanning Systems Inc. - Eugene, OR; **TXCOM, S.A.** - Paris, France; and **LaserData** - Orlando, FL. O'Brien will have an office in each facility and commute among the divisions. Hone will serve as the company 'visionary' in charge of long-term planning."

According to Itkin, Hone and O'Brien's first priority will be keeping the new organization responsive to customer needs. Although this sounds like a typical public relations statement, maintaining customer support after an acquisition can be difficult. "When a company doubles in size, almost overnight, many problems have to be solved," said Itkin. "When customers call one of our manufacturing facilities, we have to be able to answer their questions or solve any problems they may have. This means we [the staff at any of PSC's various divisions] must have a thorough knowledge of each other's

product lines. With the acquisition of Spectra-Physics, we gain a much broader array of solutions."

Itkin told us there has been very little overlap in the PSC and Spectra-Physics product lines. PSC's specialty is laser-based, handheld and fixed-position, bar code readers and verifiers for automatic data collection (ADC) in retail, manufacturing, transportation, distribution, food and health care industries and government. Spectra-Physics' expertise is countertop and in-counter bar code scanners for the retail industry which accounts for 50% of the bar code market.

Hone and O'Brien intend to focus the engineering resources of all divisions on developing solutions to meet both the warehousing and POS (point of sale) needs of large retail chainstores. For example, PSC is currently working with **Wegman's** in Rochester to provide a full range of scanning products to meet the company's distribution and retail ADC needs.

If the goals of PSC's management are met, there will be an overlap of technologies where none existed before. But, it will be an intentional overlap which will provide total solutions to retail distribution. "We believe our divisions can accomplish a great deal more as one company than they could as individual organizations," stated Itkin. "We intend to capitalize on bar code reading - our core strength."

For more information: **PSC, Inc.**, Webster, NY, PH (716) 265-1600, FX (716) 265-5453, E-mail: mktg@pscnet.com. SCAN

Peak Technologies Continues Expansion - Germany And Switzerland Latest Acquisitions

In early 1994, Nic Toms, chairman and CEO, The Peak Technologies Group Inc., predicted he would be "turning his attention to Europe" and would "actively seek acquisition opportunities there" (*SCAN Jan 94*). By November of that year we were reporting the company's acquisition of **Endata Group Ltd** (UK) (*SCAN Nov 94*), a systems integrator of bar code capture and wireless data transmission products. The company's latest acquisitions are **SASS Computer GmbH**, headquartered near Frankfurt, Germany, and **Barcode BC Systeme AG** (BCS), a leading bar code, data capture, integrator in Zurich, Switzerland.

SASS is a German provider of printing solutions, consumables and services. Among its businesses,

SASS is a value-added reseller for leading printer manufacturers, including **Printronix** and **Dataproducts**. In announcing the acquisition, Peak Technologies said it plans to capitalize on the "considerable base of local operating experience and expertise developed by SASS". Peak will add to this list products from manufacturers such as **Symbol Technologies**, **Zebra Technologies** and **Norand**. Peak will also distribute its own range of proprietary software packages for warehouse, transportation and other industrial applications through SASS.

BCS has penetrated the Swiss market by offering customers technical consulting and support services together with hardware from major manufacturers, including Symbol Technologies and **Eltron**. Jeffrey Thomas, vice president of European operations at Peak Technologies, stated, "BSC has its prominence in Switzerland's bar code, data capture, market by forming a team that can provide its customers complete systems, product and service solutions.

"Peak, together with SASS and BCS, will continue to concentrate on building long-term relationships with existing German and Swiss customers while expanding the markets for Peak Technologies' products and services internationally." With the addition of BCS and SASS, Peak now has 30 locations in Europe.

For more information: **The Peak Technologies Group, Inc.**, PH (212) 832-2833, FX (212) 832-3151 SCAN

Will New RF LAN Interoperability Standards Solve Your Problems?

Some members of the radio frequency (RF) industry view the Wireless LAN Interoperability Forum (WLIF) as direct competition with the work being done by the IEEE 802.11 standards committee. Because **Proxim** [a manufacturer of RF LAN access points (radios)] was a main sponsor of the WLIF, we wanted to hear the company's response to the recent passage of the IEEE 802.11 D4 specification. [Both IEEE 802.11 and the WLIF standard address interoperability between RF LAN components.]

Speaking for Proxim, Public Relations Manager Dan Toporek congratulated the IEEE 802.11 committee and restated the company's pledge to support the new standard. Toporek also pointed out that many obstacles to true interoperability still exist.

The Inter-Access Point Protocol (IAPP), developed

by **Aironet**, **Lucent Technologies**, and **Digital Ocean**, addresses interoperability between RF access points, but not all manufacturers have agreed to support the specification. IEEE 802.11 does not cover communication between access points and until all companies agree to work within one standard for this element of RF technology, there cannot be true interoperability.

There are also incompatibilities between direct-sequence and frequency-hopping access points. And according to Toporek, some of these may be impossible to overcome. "There are different pockets or camps [groups of RF product manufacturers] throughout the industry that support one type of RF system over another," Toporek asserted. "Soliciting total backing [from all manufacturers] for one type of system will be almost impossible."

One of the most important concerns is what to do with the hundreds of thousands of installed RF systems already in the field. "The customers who have already purchased our products deserve our support," stressed Toporek. "We must do everything possible to offer these customers the benefits of interoperability." [Toporek was referring to the direct-sequence and frequency-hopping systems in use that do not meet the IEEE 802.11 standard.]

Closing, Toporek stated, "The standard still has a long way to go before it becomes a published specification. The ratification process could take a year. What remains to be seen is how long it will take companies to implement the IEEE 802.11 standard into their products."

For more information: **Proxim, Inc.**, Mountain View, CA, PH (415) 960-1630, FX (415) 960-1984, E-mail: brian@proxim.com. ▩

End-Users And Vendors Benefit From ADC Education
You Can Take Advantage Of This

Over 300 college professors and almost 24,000 students have learned about ADC, thanks to the efforts of Dr. James Fales (Ohio University) and **AIM USA** (the trade association for the Automatic Data Capture industry). Each year in mid-July, Dr. Fales and his staff present a six-day seminar referred to as, the "**Automatic Data Collection Technical Institute**." The course is for college professors who wish to incorporate the study of ADC technology into their curricula. As a result, ADC is now part of many undergraduate and graduate programs around the world.

ADC is taught in colleges in two ways: as a stand-alone course or as a part of another course. Some disciplines that include ADC are: Production Control, MRP (Material Requirement Planning), Materials Management and Medical Records Management. To date, no colleges or universities offer ADC as a major or minor. But the Warsaw (Poland) University of Technology is starting an ADC studies program and is considering it as a separate curriculum.

SCAN/DCR was given a special opportunity to see how the institute operates and we were very impressed by the thoroughness of the course. In addition to classroom instruction, Dr. Fales' course includes six hours of hands-on lab time, in 30-minute sessions. During our visit to the institute, the class divided into pairs for the lab sessions. Each pair had its own instructor.

"The labs are very important," said Fales, "because the talk [material taught in the classroom] comes to life. But the biggest problem for most professors teaching ADC is obtaining equipment and funding for the lab. We show teachers how to solve this problem during our course."

Over the last 10 years, Fales has accumulated nearly $250,000 in donated ADC equipment. When he solicits donations from a hardware supplier, Fales explains, "It is human nature for people to buy the same equipment they learned on. For example, if a person learns how to drive in a **Ford**, he is apt to buy the same kind of car when faced with a purchasing decision. This holds true with ADC equipment also."

"Many times their donations turn out to be a great investment for manufacturers," said Fales. "The most important thing we tell ADC instructors is you have to <u>ask</u> [for donations] if you expect to get equipment for your program. This industry is very generous toward education, whether it be donating equipment or speaking on a particular subject in one of our classes."

In addition to the yearly program for professors, Fales teaches year-round ADC courses to university students. [Editor's note: Fales heads the Industrial Technology Department as well as the Auto ID Center.] Fales also oversees "technology transfer projects" which are part of the course taught to Ohio University students.

Manufacturers who donate equipment benefit in special ways from technology transfer projects. In these projects, college students and professors deliver custom, on-site seminars for end-user companies which request help in setting up ADC solutions. When a request for help is submitted,

students evaluate the company's manufacturing environment. When they are through with their evaluation, the students make recommendations to the company that made the request, about how to solve it's ADC problems. Equipment is brought to the company from the college to demonstrate "proof of concept" [test their recommendations].

"Everybody wins in this situation," said Fales. "It is a valuable learning experience for the students. The end-user company has its ADC problems solved. And manufacturers who donate equipment receive free 'advertising' for their products." Fales makes no claims of superiority about equipment used on site.

Ohio University also serves as a test site for ADC equipment. Manufacturers can send their products to Fales' staff for independent testing. For example, scanners can be tested to determine error rates. The "Code 16K and Code 49 Data Integrity Test" which was conducted to establish base line reliability data for the first two-dimensional bar code symbologies was done for AIM USA. And the "Datamatrix and PDF417 Data Integrity Test" which was conducted to evaluate the robustness of those two high-data, capacity symbologies was done for **Martin Marietta Energy Systems**. There is a fee for the service and the results are the property of the company paying for the test. Fales confided that all research projects must be self-supporting with no use of university money.

Although attendance was down slightly [32 attendees this year - compared to the usual 40+], Fales said the institute is doing well and expects next year's turnout to break all records. AIM USA, the co-sponsor of the yearly seminar, continues to expand its role in developing educational programs [See Sidebar].

For more information: **The Center for Automatic Identification**, Russ College of Engineering and Technology, Ohio University, Athens, OH, PH (614) 593-1452, FX (614) 593-9382, E-mail: jfales l@ohiou.edu.

AIM USA CREATES NEW FOUNDATION FOR ADC EDUCATION

At the June board meeting for **AIM USA**, members created a new "Foundation" to address educational programs in the Automatic Data Capture industry. Because of its non-profit status, donations will be tax deductible (unlike donations to AIM) and the Foundation will be eligible for special funds and grants.

AIM USA has contributed money and time to ADC educational programs in the past, particularly the Automatic Data Collection Technical Institute held each year at Ohio University under the direction of Dr. James Fales, CMfgE. AIM co-sponsors the institute and has donated over $300,000 to the program in the last 10 years.

AIM President & CEO, Larry Roberts stated, "We feel education is important for a number of reasons. Most companies today do not have time to administer elaborate, employee-training programs. If a young person coming out of college has a background in ADC, it is good for our industry and for prospective employers who may be interested in purchasing an ADC solution. The benefit to our industry is in the form of increased sales. The employer benefits by hiring an employee who is familiar with ADC solutions. The new foundation intends to develop marketing courses to supplement Dr. Fales' efforts [it has not been decided who will present these courses]."

According to Roberts, Purdue University has expressed an interest in starting an ADC educational program using AIM for a reference point. Also, the Warsaw (Poland) University of Technology is starting a program using knowledge gained at Dr. Fales' institute. "We would like to see Dr. Fales' program expand," said Roberts. "If we, as a nation, want to have a quality work force, we need to get more college students involved in ADC courses. The sooner we get started, the better off the industry will be."

For more information: **AIM, USA**, Pittsburgh, PA, PH (412) 963-8588, FX (412) 963-8753. *SCAN*

FINANCIAL NEWS

How Is Eltron Achieving Record Growth?

Eltron International Inc. recently announced financial results for its second quarter ended June 30, 1996. With sales nearly doubling from the same quarter last year, the release marks the 22nd consecutive quarter of record growth. Eltron showed strong gains in bar code printer sales, including **RJS** [a division of Eltron] printers and verifying systems. Sales also increased for the company's on-demand, color card printers and supplies business.

Much of the company's sales and financial success can be attributed to new product introductions. Eltron has released 30 new market offerings in the past five years. Chairman and CEO of Eltron, Donald K. Skinner stated, "You have to keep up with the competition in introducing new products. If our competitors are constantly improving their products and introducing new models, we must do the same. However, we also believe it is equally important to keep close watch on engineering costs. Too often companies jeopardize earnings by failing to hold down R&D (research and development) costs associated with new product roll-outs. You have to monitor what you're spending."

Eltron's quarterly results come on the heels of the company's announcement of smart card programming capability. Eltron's "Privilege" line of card printers now includes a printer to be used with smart card technology. Smart cards have an embedded computer chip that allows the user to read and write to the card [the computer chip stores information which can be retrieved or updated]. Skinner told us company plans are to use the new programmable cards to target the security and access control market, particularly in the medical industry.

Eltron purchases the blank cards from an OEM (original equipment manufacturer) and sells the printer for labeling the cards. Skinner said his company is keeping options open for new suppliers of the programmable cards. Also, a new high-end card printer will be launched in coming months.

President of the **"Privilege Card" Division**, Patrice Foliard added, "The cashless-society concept is currently gaining momentum in European countries. In the second half of 1997 and the first half of 1998, we foresee strong growth of the 'electronic purse' market in the U.S. We expect this to be a very profitable market for our company." [The term "electronic purse" refers to the use of

smart cards in place of money. For instance, the balance in a checking account could be programmed into the smart card's computer chip. Whenever the user pays for a purchase with the card, the balance is reduced automatically on the card. Another application under consideration by government leaders is replacing food stamps with programmable smart cards. The theory is that smart cards would be more efficient and cut down on fraud and misuse.]

Skinner told SCAN/DCR, "There are three or four companies marketing smart cards in Europe, but we wanted to be the first to market this product in the United States. Although Fargo (Eltron's largest competitor for this product line) does not offer programmability yet, we assume they will compete with us in the future. We intend to market this line through a VAR and distributor channel."

The roll-out costs associated with Eltron's programmable smart cards were minimal according to Skinner and Foliard. "It is not a complicated technology, but nevertheless, we monitor costs very carefully," said Foliard. Skinner added, "Many companies are more concerned about increasing gross sales than reducing costs and increasing productivity (which also makes money for the company). We realize overall profitability is a product of all of these functions"

As Automatic Data Capture products become more affordable, Skinner said the health care [medical] industry should finally reach its true potential for sales. "For years, members of the ADC community have touted the health care industry as a target market with tremendous growth potential. Now, the health care industry has been forced to find methods of cutting costs and improving efficiency. ADC is an answer to both these problems. Our earlier sales efforts lacked focus. Our sales to the health care market were on a hit-or-miss basis. We now have a dedicated sales staff to cover the health care market."

ELTRON INTERNATIONAL INC.
Financial Highlights
(In thousands, except per-share data)
Three months ended
June 30,

	1996	1995
Sales	$22,730	$12,181
Gross profit	9,940	5,442
SG&A	4,161	2,474
Research and development	1,279	692
Income from operations	4,500	2,276
Other expense (income), net	(19)	(18)
Profit before taxes	4,519	2,258
Provision for income taxes	1,695	764
Net Income (loss)	2,824	1,494
Earnings (loss) per share	36 cents	21 cents
Average weighted shares outstanding	7,756	7,083

Comment: A number of manufacturers have recently experienced disastrous results during new product launches, particularly with respect to profitability and earnings per share. It seems clear while R&D is important to any company's competitiveness in a chosen market, it is equally important to monitor the costs closely. Eltron is proving a company can consistently release new products while maintaining profitability as well.

For more information: **Eltron International, Inc.**, Simi Valley, CA, PH (805) 579-1800, FX (805) 579-1808. **SCAN**

Will Telxon Meet The Profitability Challenge?

Telxon's first quarter fiscal 1997 financial results are in and the report certainly raises a lot of questions in our minds. It appears the company is doing some reorganization that's been needed for a long time. The following items from the report caught our attention.

For the first quarter, ended June 30, 1996, the company reported results in line with earlier management guidance, recording revenues of $112.4 million and a net loss of $.29 per share.

Frank E. Brick was named President and Chief Operating Officer on June 19, 1996, and now replaces William J. Murphy on the Board.

[Brick] "We have begun the process of streamlining operations across the board at Telxon. We have already taken steps to reduce the number of products offered and to achieve greater efficiencies in manufacturing."

[Brick] "We are reducing employee head-count by 200 or approximately 10% of the overall work force. Reductions are occurring in manufacturing, the deconsolidation of subsidiaries, and other operating areas."

[Brick} "Our renewed focus on cost containment and efficiency should produce the sustainable long-term growth in profits we expect ..."

[Kenneth W. Haver, senior vice president and CFO] "Successful implementation of our cost-cutting initiatives should allow Telxon to return to profitability ..."

[Haver] "Telxon's financial condition remains strong, with net worth of $156 million and working capital of $178 million."

Items on the report that particularly bothered us were the 31.6% gross profit figure, down from 41.7% in the same quarter 1995, and a net loss of nearly $4.8 million. We discussed our concerns with several of the Automatic Data Capture industry's leading stock analysts [who asked to remain anonymous], seeking their thoughts concerning Telxon's current overall condition.

Although the analysts had suggestions for what Telxon must do to overcome its current problems, they also had positive comments about the company. One analyst spoke very highly of former Telxon President, Pat Murphy, and said, "Pat is very well liked. He's a natural sales and marketing leader." This same analyst felt the company would fare well with Murphy's move to head of company sales.

On the subject of Frank Brick's presidential appointment, the analysts believe he has the skills to make the cuts necessary for Telxon's survival. Brick's background is in operations which will be a plus in solving some of the company's manufacturing inefficiencies. But he will need to back up this operations knowledge with sales savvy as well.

The analysts also spoke of Telxon's customer loyalty, but had different notions about how Telxon should interact with these clients. One analyst said, "Telxon has many customers who are extremely loyal, but also very demanding. Telxon has to bend over backwards to meet their needs. This is often very costly, particularly with respect to profit margins."

Another analyst agreed that "Telxon has an extremely loyal customer base." However, this analyst thought, "Telxon could occasionally call their [customers'] bluff because they have a great line of products and their customers know it." Even with cuts in staff and changes in manufacturing processes, Telxon may have to re-examine its pricing practices. Almost everyone agrees Telxon profits have been hurt in the past by "aggressive pricing."

The analysts surprised us by revealing that Telxon is apparently plagued by "malicious" rumors spread throughout the industry. Some of the hearsay has to do with the company's stability, but more often it is directed toward the Telxon product line. The suggestion that these rumors are part of a deliberate campaign by competitors to smear the company's name with its customers is unsubstantiated, although we heard this charge in a number of our conversations.

As for suggestions or advice to Telxon, the analysts we talked to suggested Telxon: "take a serious approach to its problems. Rhetoric is not going to

get them out of the position they're in. They have to get their manufacturing costs in line and learn to walk away from poor [unprofitable] business."

We also talked to David Loadman, senior vice president of Telxon, to obtain specifics about the company's strategy to reduce manufacturing costs and increase profitability. Loadman told us, "Our approach could not be more serious. We are reducing personnel and changing our entire way of thinking with respect to custom orders and manufacturing processes."

Loadman gave us an example of what the company is doing. In the past, if a customer liked a particular Telxon product, but felt the price was too high, Telxon would redesign the unit in an attempt to lower the product's cost. This was a problem for Telxon because special orders are more costly to produce. And the customer might only order 10 units in a year's time.

Telxon now realizes it is too costly to engineer a new product for such a small order. Also, the company had to maintain a support team after product delivery, resulting in even further cost increases. "We now realize we would have been better off to have lowered the price on the standard unit rather than to go through these special processes," said Loadman. "Our top accounts generate 90% of our revenues. We want to focus on these accounts and rid ourselves of the 10% that drag our profits down."

Telxon's goal is to maintain its production output with a "lighter expense rate." Another way to decrease expenses is to use common components when designing new products. Using common components allows buyers to do volume purchasing which in turn, lowers costs. For example, if Telxon could use the same housing on all the scanners it sells, the company would save money through volume purchasing [This is only an example and not necessarily feasible].

Telxon also claimed it would "reduce the number of products offered." Loadman confided, "In looking over our product line, we found we had overlapping functionality. The procurement and support functions for these products are very costly. Our aim is to offer a set of standard products. In doing this, we believe we can streamline our operations and rid ourselves of inefficient buying practices that have hurt our earnings. By making these changes, we believe we can improve profits."

Comment:

We believe Telxon will survive the current dilemma it is facing. Most analysts claim Telxon is a good company with a solid asset base and a quality line of products. If the company sticks to its plans and is serious about making changes [and we feel the management is serious], it will likely solve its current problems. How long this streamlining process will take remains uncertain.

For more information: **Telxon Corporation**, Akron, OH, PH (330) 867-3700, FX (330) 873-2889, E-mail: dload@telxon.com. SCAN