No changes will be made....

....by Reed Exhibitions about any future plans it might have to relocate the SCAN-TECH Exposition until the results are in for this year's event (Oct 23-26) and until the exhibitors make their wishes known.

Our article last month addressed the very important issue of whether the industry was best served by scheduling the two national auto ID trade shows every year in the same city (SCAN Aug 95).

We excerpted parts of a report prepared by Bill Windsor, President of Advanstar, which explained his company's reasons for continuing its ID Expo show at the Rosemont Convention Center near Chicago's O'Hare airport. Windsor vigorously defended the benefits of two shows each year, but he suggested that it would be best for all if Reed would move SCAN-TECH out of McCormick Place and try alternate venues throughout the country.

Windsor followed up, on August 10, with a personal letter sent to every ID Expo exhibitor. Under the heading, "Re: Your best interests," Windsor advanced the same arguments for supporting ID Expo that we outlined in SCAN last month; i.e., ADC can support two trade shows, but having both in the same city will "hurt the industry"; SCAN-TECH has unfairly moved into ID Expo's Chicago territory; exhibitors favor Rosemont over McCormick Place.

On September 11, Bill Howell, Vice President of Reed Exhibitions, wrote to SCAN to establish his company's position on this major issue. He refused to make any commitment to move SCAN-TECH out of Chicago. "SCAN-TECH will stay [in Chicago]," Howell wrote, "for as long or as briefly as our customers, the exhibitors that we serve, tell us to stay. Our customers are the people that we listen to and they drive what we do."

Howell pointed out that Reed's decision to locate SCAN-TECH at McCormick Place was based on "numerous meetings with the major exhibitors in the industry" which were held just before Reed bought the show from AIM/US in 1993 (SCAN Jun 93, Aug 93). "The overwhelming response from the exhibitors," Howell relates, "was 'Hold SCAN-TECH in Chicago'."
Some background: In 1993, AIM/US was facing possible defections by a number of key SCAN-TECH exhibitors who blamed the trade association for the disappointing results of the 1992 exposition in Anaheim. These unhappy vendors were threatening to pull out of the scheduled SCAN-TECH 93 in Philadelphia. Many of these companies pointed to the growing success of ID Expo, which had settled in the Chicago area in 1990.

AIM/US bowed to the pressure and sought a new exposition owner. AIM's decision to sell SCAN-TECH to Reed seemed to be welcomed by everyone. The exhibitors were pleasantly surprised when the 1993 event in Philadelphia turned out to be one of the best ever. Although the results suggested that other parts of the country also might be very suitable locations, AIM/US had already contracted for Chicago's McCormick Place for 1994. When Chicago (which Reed uses for many of its other trade shows) turned out to be a success, Reed happily settled SCAN-TECH into that venue for the long run.

Which brings us back to the burning issue of how to best satisfy the education/information needs of the rapidly growing ADC market. In response to our article and the August 10 Advanstar letter, a number of exhibitors wrote or phoned SCAN to make their feelings known. Here is a sampling:

Stuart Itkin, VP Marketing, PSC:
"In all likelihood, we will attend one show only, or we will emphasize one and reduce participation in the other. Right now, we would probably favor SCAN-TECH. We were disappointed with the turnout at ID Expo 95. Above all, we would like to see changes in the way these shows are conducted. People already accept that bar codes are a good technology and we no longer have to educate them on bar widths and color contrast. We want to see a broader emphasis on applications -- how to apply and integrate ADC technology."

Bruce Wray, Marketing Manager, Computype:
"The show managements are doing a disservice to the industry by focusing everything on Chicago. Although we do not believe there should be two shows in the same city five months apart, we will continue to support both of them -- but there is no way we will enlarge our booth space. Alternating years in Chicago and other national locations would be the way to go."

Dennis Stevens, VP, Sato America:
"The 'exhibition wars' between Reed and Advanstar are doing none of us...any good....The concept of alternating years for each show, and even each venue, in Chicago is sound. If such an arrangement is worked out (under any auspices) we would continue to exhibit at both shows. On the other hand, if both shows continue in Chicago we will not continue at both shows. Having kept my ear on the ground on this matter, I am quite sure that there are many others making this same decision." [In a separate letter to Advanstar, Stevens stated: "I do not know whether or not we will exhibit at ID Expo next year. We are one of the exhibitors that signed up for 96 during the 95 show."]

Monroe Miller, Jr., President, Monicor Electronic:
"SCAN-TECH...[in] McCormick Place several years ago...was one of the most bitter experiences I have ever had at a show. The most prominent factor in our view is the labor union problem at McCormick. We were overcharged, harassed, and had many other unpleasant experiences. I simply vowed never to go to McCormick ever again."
Comment

Last month we pointed out that the laws governing restraint of trade prohibit Reed and Advanstar from sitting down together -- even if they wanted to -- to work out an amicable arrangement. Our suggestion that AIM/US assume the role of arbitrator ran up against the same brick wall of legal restrictions.

As best we can determine, there seems to be general agreement among vendors that the industry would be served best by one annual event in Chicago and one in a different venue each year, with Reed and Advanstar alternating locations. The inability of Reed, Advanstar or AIM/US to make the initial move demands that the exhibitors make themselves heard -- individually or collectively -- in order to prod the principals to take some action.

If the industry lacks a leader willing to take on that responsibility, we suggest that exhibitors write directly to Reed and Advanstar expressing their opinions. We feel certain that such expressions of disaffection with the status quo will attract their attention more than any editorial in this journal. We will continue, however, to make these pages available to anyone wanting a broader audience for their messages.

In a back door move....

....Spectra-Physics seems to be quietly testing the waters to expand its Data Capture Group beyond scanning systems. On August 30, Spectra acquired 60% of TXCOM (Paris, France) for an undisclosed sum; Spectra plans to acquire the balance of the company by January 1999.

TXCOM is described as "a successful manufacturer of radio frequency (RF) products and systems used primarily for automated identification and data collection applications." Founded in 1990, the company's product offerings have evolved from RF modems to a variety of portable and fixed RF-based data terminals, wireless networks and associated software for both commercial and industrial wireless applications.

In announcing the deal, John O'Brien, President of Spectra-Physics Data Capture Group, stated: "The acquisition of TXCOM provides significant synergy with our Scanning Systems business. It brings fundamental technology to our portfolio where we anticipate a strong marriage of scanning and RF systems. We also are able to forward integrate our scanner peripherals into more value added system offerings via TXCOM's terminal and software capability."

TXCOM will become part of Spectra-Physics' Data Capture Group (Eugene, OR), which currently includes Spectra-Physics Scanning Systems, Inc. TXCOM's President, Vincent Baumier, believes that Spectra will expand his company's distribution -- which is currently confined to France -- to "other European countries and throughout the world."

[At press time, O'Brien had not returned our phone calls requesting an interview. No one else at Spectra-Physics was authorized to comment on the company's first significant move into RF products. (TXCOM is not

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listed on any of the major ADC industry rosters. For example, the company did not exhibit at SCANTECH EXPO Europe 94 in Paris. We hope to have more information about this interesting development in a later issue."

Never one to mince words....

....Craig Harmon (Q.E.D. Systems) took us to task, unsparingly, for our article last month on two-dimensional symbologies (SCAN Aug 95).

Based on recent editorials in Auto ID News and ID Systems, and a research report by Kurt Salmon Associates, we were prompted to write: "The general optimism and enthusiasm about the advent of new applications for 2-D symbologies seems to have abated."

Harmon relegates those who continue to support twenty-year-old technologies (e.g., linear bar codes such as UPC/EAN and Code 39) to the "Flat Earth Society." He suggests that "you would have your readers believe that linear bar codes are tried and true technologies that one shouldn't discard for the enticing promises of two-dimensional symbols." To Harmon, the reality of the situation is quite simple. "Circumstances," he insists, "are driving us out of the linear world."

In a six-page, 3,500-word essay sent to SCAN, Harmon describes in great detail the major applications of 2-D symbologies which are awaiting the "leading edge" users. These ready-to-use applications include:

- **Encodation of Sortation/Tracking Data:** "One where a carrier, shipper or consignee is handling a high volume of items [like FedEx or UPS with millions of sorts per night]...to be read and handled at high speeds."

- **Small Item Marking:** "The electronics, aerospace, automotive and health care markets have needs that go unmet with linear symbols....For traceability purposes, [electronics manufacturers] need manufacturer, product code, and a traceability code....Even with compromises as to what they really 'needed,' the data requirement was for 57 characters of data."

- **Encodation of EDI-type Data:** "Increasingly, customers are asking for an EDI message...detailing the contents of in-bound shipments....The data may not be transmitted...for hours after the freight leaves....What if we were able to put the appropriate Ship Notice/Manifest data into a 2-D symbol...[attached] to the shipment?"

- **Encodation of Shipping Label Data:** "Bar code labels being used within the chemical, electronics, aerospace, retail and automotive industry...are bar code billboards. These labels may have 3, 4, 5, 6 or more bar code symbols....The standard label size in industry today is a 4 x 6 or 4 x 6.5 inch label." (Money can be saved, Harmon argues, by reducing the size of the labels and scanning just one 2-D symbol.)

- **Industry Specific Applications of Large Data Files:** "Passports, visas and government ID cards all have a critical need to match the card to the bearer. Photographs can be relatively easily replaced....the Universal Health Care Card...can have information such as name, address, telephone,
next of kin, health care insurance, coverage, allergies/reactions, blood
type, etc., encoded in a symbol consuming a little over a square inch.

- **Product and Product Packaging:** "We may even see the demise of the
hallowed UPC symbol."

Harmon believes applications will flourish as industry standards are developed.
Then, as more 2-D scanners are produced, their higher cost will come down.

He winds up his treatise with the exhortation: "Wake up and smell the coffee --
the new world of 2-D is a-coming!"

**Comment**

We could almost hear the Hallelujah chorus playing in the background.

Who can argue with the exciting possibilities offered by 2-D symbologies
and the new applications that are springing up each day? There are now
more than twenty 2-D symbologies on the market, with the sponsors of each
one scrambling for their share of the pie.

We have never disputed the notion that cramming more data into smaller
spaces will open up new market opportunities. We only caution that the
size and growth rate for 2-D should not be compared with the introduction
of linear bar codes in the 1970s and 80s. Twenty years ago, bar codes
replaced the clipboard and the abacus. Entire industries were being
hammered by their inability to enter data into their computers quickly
and accurately. There was fertile, untilled soil waiting for bar coding.

If we closely examine Harmon’s arguments, we find that many of the larger
applications he describes require the replacement of industry-wide,
linear-bar-code-based technologies and systems which were installed only
recently and are functioning satisfactorily. Arguably, two-dimensional
symbologies may be able to out-perform all of these linear-based systems.

However, we believe that this new technology will have to fight its way
into the industries now using the "old-fashioned" UPC/EAN, Code 39, Code
128 and I 2/5 linear bar codes. Ultimately, therefore, the choice of
symbologies becomes a marketing -- and not a technological -- challenge.

**Additional baseline statistics**....

....on "US consumption of bar code products in 1994" were recently released by
Venture Development Corporation (Natick, MA).

In making any comparisons of year-to-year or region-to-region statistics
compiled by VDC or its competitor Frost & Sullivan (Mountain View, CA), it
is critical to first examine the basis for the data.

In the past, VDC has reported what it refers to as "supply side" analyses;
e.g., its numbers for "US shipments" were comprised of total shipments by
US suppliers (to customers in the US and abroad), plus shipments by non-US
vendors to customers in the US. VDC now reports the data more
realistically based on the "consumption" of bar code products. This figure is defined as "shipments by US suppliers to customers within the US and total shipments by non-US vendors to customers within the US."

Earlier this year, VDC issued a similar report on 1994 consumption of bar code products in Europe (SCAN Apr 95). The following is a comparison of 1994 consumption -- by commodity groups -- of bar code products in the US and Europe:

<table>
<thead>
<tr>
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<th>United States</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ Million</td>
<td>% Total</td>
</tr>
<tr>
<td>Scanners</td>
<td>603</td>
<td>22.0%</td>
</tr>
<tr>
<td>Data Terminals</td>
<td>466</td>
<td>17.0%</td>
</tr>
<tr>
<td>Printers</td>
<td>485</td>
<td>17.7%</td>
</tr>
<tr>
<td>Consumables</td>
<td>584</td>
<td>21.3%</td>
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<tr>
<td>Software</td>
<td>203</td>
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<tr>
<td>Services</td>
<td>238</td>
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<tr>
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<td>162</td>
<td>5.9%</td>
</tr>
<tr>
<td>Total</td>
<td>$2,740</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* For the European market, "Data Terminals" is defined as Data Collection Terminal Systems and includes terminals, base stations, printers and controllers. For the US market, this category includes only those terminals with an integrated or tethered bar code scanner.

It’s that time of the year....

....when the three major international SCAN-TECH shows converge.

1. **SCAN-TECH/US** (Oct 23-26), the granddaddy of all ADC expositions, will be held at McCormick Place in Chicago. This show is owned and managed by Reed Exhibitions, with a conference program sponsored and designed by AIM/US and its members. Sixty technical sessions are divided into three focus areas:

   - **ADC Technologies and Industry Applications** -- covers all systems for a variety of industries.
   - **Systems Applications & Databases** -- describes how to manage and utilize data for better business decisions.
   - **Electronic Commerce** -- explains how to efficiently and cost-effectively transmit valuable data between systems.

On Tuesday, October 24 at 12:15 PM, Tim Stone, VP Corporate Business Research in Motorola's Corporate Strategy Office, will deliver the keynote address describing today's wireless world, and the growing trend for products to become smaller, portable and multifunctional.

Further emphasizing the growing importance of radio frequency in the ADC industry, an RF Data Collection Pavilion on the exhibition floor will include "the very latest equipment in wireless technologies." There will be eleven exhibitors in the RFDC Pavilion: Citadel Computer, Granite Communications, Ritron, Disticom, Evcor, Trilithic, Symbol Technologies, Ann Arbor Computer, Teklogix and Par Microsystems.
[The Percival Award will be presented at 9:00 AM, Tuesday, October 24, at the SCAN-TECH/US session devoted to Industry Announcements (Room N228 on Level Two at McCormick North). Sponsored by SCAN Newsletter and AIM/US since 1982, the Percival has been given to a person (or company or organization) from the "user" community who has made an outstanding contribution to the automatic data capture industry.

Last year's Percival Award recipient was United Parcel Service, in recognition of its development of the MaxiCode 2-D symbology for high-speed sortation of packages. UPS had placed MaxiCode in the public domain and actively participated in the preparation and funding of related industry standards.]

2. SCANTECH EXPO Europe (Nov 7-9) will move back to Köln, Germany following last year's event in Paris. Advanstar Expositions, which acquired the international show from AIM/Europe in 1993, has been vigorously promoting this year's event after last year's rocky experience. (Last year, Advanstar was forced to cancel the seminar program due to poor response; Advanstar also came close to cancelling the entire event when a lawsuit was filed in Paris contesting the rights to the SCANTECH name [SCAN Nov 94, Dec 94].)

According to David Epps, Advanstar's Exhibition Manager, this year's show will feature a three-fold expansion of exhibit space and a full conference program. Some exhibitors will be grouped together within three specially designated "thematic" sections: card technology; labels and ticketing; and EDI.

For the first time under Advanstar, the responsibility to organize the seminars was sub-contracted to an independent company (Munich-based Neller, Muller & Partner). More than thirty presentations are planned covering a wide range of auto ID topics -- including bar coding, RFID, RFDC, and microwave identification. Although most of the scheduled speakers are from Germany and Austria, the conference language will be English.

3. SCANTECH Japan (Oct 3-5), sponsored by AIM/Japan will be located at the Tokyo Ryutsu Center. This major international conference covers all ADC technologies and usually attracts about 10,000 visitors from the Pacific region. Although nearly all of the exhibitors are Japanese companies, they will be showcasing products from manufacturers from all regions of the world.

We will be reporting significant product and corporate developments from all three SCANTECH events during the next few months.

The "full field test in Hawaii"....

....by the Department of Defense of their new personnel identification cards -- that we referred to our June 95 issue -- goes well beyond the evaluation of just one symbology.

This was pointed out to SCAN by Steve Winter, Intermec's General Manager of Strategic and Government Programs, who wrote: "While the new DOD identity card...does contain a PDF-417 symbol and every DOD employee, soldier, and dependent will eventually carry one, the test that is being run in Hawaii is actually for the Multi-technology Application Reading Card (MARC) Project. MARC
is a 2 Kbyte Integrated Circuit Card (Smart Card) that includes several other auto-ID technologies, including magnetic stripe [and] Code 39 bar code, plus a photo ID, embossed lettering, and a signature stripe."

We called Mike Noll -- Program Coordinator for Automated Data Input Programs, Office of the Secretary of Defense -- to learn more about the MARC program.

[Noll brings impeccable credentials to any discussion of automatic data capture applications for the military. In 1982, he was the first recipient of the SCAN Newsletter/AIM USA Percival Award for his work in the development, testing and adoption of the LOGMARS program which led to the widespread use of bar coding by the US government. Noll is now overseeing the MARC project in Hawaii from his office in the Pentagon.]

Currently, military personnel carry many separate cards, such as basic ID, meal card, medical/dental records, training and readiness record, etc. MARC is designed to integrate all of that information into one card, with the added feature that it can be readily updated; e.g., any medical treatment -- such as special inoculations before deployment to a new assignment -- can be immediately entered into the MARC computer chip by authorized medical personnel. "It is very important to note," Noll said, "that MARC is intended as a 'benefit' card for the military personnel and that nothing will be included on the card which can in any way harm the individual."

The test program began in August 1994. According to Noll: "There are currently 18,600 cards issued to 25th Army Division personnel stationed in Hawaii. During the two-year test, we will probably add Marine Corps, Navy and Air Force personnel and dependents, and civilian government employees. The total on Hawaii may reach 100,000-to-200,000 people by the end of the test. There are now about fifty MARC readers in place. The Hawaii program will test the durability and security of the chip. We also will analyze the reduction in waiting and processing time for daily activities and how far forward into combat the card should be carried."

The MARC concept was enthusiastically supported by the Joint Chiefs of Staff who were dissatisfied with the tracking of personnel during the 1990-91 Desert Storm action in the Persian Gulf. The troops were not always where they were supposed to be. The system was used successfully last year, when men and women of the 25th Division were sent from Hawaii to Haiti. "The Commanding General of the 25th Division," Noll reports, "now estimates that the entire division can be deployed about three days faster than before by using the MARC card."

All of the equipment and supplies for the MARC system are being purchased by the DOD from Intermec, based on its current five-year government contract (SCAN April 94). Noll estimates that the cost of each card is now $4.00. He expects the price to come down significantly as the usage increases. The standard US military identification card -- which incorporates a PDF 417 symbol with the encrypted photograph of the bearer -- was issued to all personnel last year and costs about $.40 each. Noll expects that eventually both systems will be merged into one universal card, including all of the technologies and information.