The management Newsletter for all industries involved with bar-code scanning and related technologies.

SCANNING, CODING & AUTOMATION NEWSLETTER • 11 Middle Neck Road • Great Neck, N.Y. 11021 • (516) 487-6370

INCLUDING THE INTERNATIONAL EDITION

Volume X Number 4

ISSN 0273-3080

December 1986

The Basel, Switzerland venue....

....and the SCAN-TECH/Europe 86 conference and exhibition seemed to satisfy those who attended as seminar delegates, general visitors or vendors. It was full of variety and had grown in size and stature. The number of exhibitors was up -- to over 50 -- and the stands in the 1,000 square meter hall were bright and lively, giving a positive impression of an industry going somewhere.

Attendance was a bit down from last year, which was disappointing. This was partially attributed to the low level of Swiss delegates — usually these shows draw their largest contingent from within 100-150 miles. Exhibitors remain optimistic, however, and have already booked more space for next year's show at Dusseldorf, W. Germany than the total that was available at Basel. A more concentrated promotional effort is planned in order to increase attendance.

We used our visit to Basel, and the opportunity to meet with industry leaders, to focus on the development of the technology in Europe. In the articles that follow, we will explore some of these topics in more detail:

- The Advanced Pocket Computer offered by Hand Held Products attracted a great deal of attention, particularly since the product is fundamentally European.
- The session on ODETTE, and its activities in the automotive industry, marked a significant development in that it represents the first European coordinated industry move in automatic identification since EAN.
- Radio frequency is a related technology with a strong European presence and worldwide implications.

We need a bit more time to digest other important products and events, which will be covered in future issues. Our overall impression is that, although the US is in no danger of losing its technological leadership in automatic identification in the near future, there is a great deal of original and complementary activity in Europe that cannot be ignored.

The conference proceedings have been printed as a paperback book and are available for 200 Swiss francs (\$120).

Contact: AIM Europe Secretariat, The Old Vicarage, Haley Hill, Halifax, West Yorkshire, HX3 6DR, ENGLAND; telephone 422 59161.

SCAN-TECH FUROPE '86

....a buzz about it that lets you know that it may make itself heard in the industry. That was the feeling about the Advanced Pocket Computer (APC) at the Hand Held Products (HHP) stands at both SCAN-TECH shows. It is not so much a breakthrough product as a clever packaging effort by the Charlotte, North Carolina-based company. It illustrates what can be done by adding together elements from different countries.

Since the success of the Microwand (SCAN Jan 85), Mike Weaver, President HHP, tells us the company has been developing and looking for a product aimed at the low-cost-end of the portable data capture and bar code market. He found the core element in a British product, the Psion Organiser II, which first appeared in April, 1986 and which targeted the UK businessman/consumer market. It is a portable computer with full programming capabilities, plus diary, calendar and information storage facilities on plug-in modules with 8K and 16K memory. Because the APC is, therefore, essentially a consumer product, production volumes are high and the base unit one-off price is a low \$295. Italian wand -- from Brondi -- makes it a truly international product. According to Weaver, the \$495 price for the full function computer/scanner decoder is a significant cost reduction when compared to competitive products.

Psion's background and growth are similar to HHP's. The company was formed during the early 1980's, and has grown to over 50 employees. Annual sales were running at £8 million (\$11.3 million), but set to soar with Organiser sales already over £1 million per month. The initial OEM deal with Hand Held is worth £2 million (\$2.8 million). David Potter, founder and Chairman of Psion, claims it to be "the biggest producer of hand-neld computers, by volume, worldwide." Peter Norman, Sales Director of Psion, told us that production capabilities are at 5,000 units per month now, and set to go to 10,000 by March, 1987.

Hand Held Products, Box 2388, Charlotte, NC 28211; 704/541-1380 Hand Held Products (Europe), Mountbatten House, Victoria Street, Windsor, Berks SL4 1HE ENGLAND, telephone 07 53 861795. Psion, Harcourt Street, London W1H 1DT; telephone 01-723-9408.

# Squeezed into the conference program....

....just a few weeks before the start of SCAN-TECH/Europe 86 was the half-day session on the automotive industry. This late entry was prompted by the recent ODETTE Committee decision to go firm on its transport label standard. ODETTE (which stands for Organisation for Data Exchange by Tele Transmission in Europe) is an ad hoc European committee, equivalent to the US Automotive Industry Action Groups (AIAG). It covers major auto manufacturers in 8 countries, including some American-owned firms. The European group has already established a multi-national communication system which went live in 1985. The committee moved its activities into bar coding when it set up their Group 8: Product and Transportation Identification, chaired by Beyron Sigvardsson (of SKF, the Swedish engineering company).

The ODETTE transport label and the AIAG shipping label are similar and compatible. Both specify Code 39 and the use of particular data identifiers to denote specific fields of data (the ODETTE Group 8 has added 1 more to identify the dispatch/advice note number). The ODETTE label itself is slightly different in that the design and layout are standardized rather than left to vendor/ customer agreement, as with the AIAG label.

SCAN/December 1986

Paul Berge, Chairman/AIM Europe, commented that the ODETTE group had achieved the greatest cooperative European bar code development since the introduction of EAN. Sigvardsson talked of the ODETTE standard having the potential of becoming a multi-industry world standard.

# Radio frequency is an emerging....

....automatic identification technology in which there is a large European manufacturing presence. Cotag (UK) and N V Nedap (Netherlands) have been known to us for some time; two companies that we were not aware of were at the Basel show.

CAN-TECH

<u>Audemars</u> is a Swiss firm which is just moving into radio frequency from a background of precision miniature engineering. Their products include the smallest coils and magnets, and the world's smallest screw. The other company, <u>Crystalate</u>, is from the UK, and has developed a method to create very inexpensive, permanently coded components for passive RF systems.

Significant reductions in the size and price of radio frequency tags will make the technology more competitive to bar coding. At the moment, the advantages of RF still lie in areas where a line of vision is impossible. RF may turn out to be one market segment in automatic identification in which the European companies provide significant leadership.

R. Audemars S.A. Via Casserinetta 28, CH-6902 Lugano, SWITZERLAND; telephone 091-541121. Crystalate Electronics, Bedlington, Northumberland NE22 7AA ENGLAND; telephone 0670 827459.

# Among the extra pleasures....

....at the SCAN-TECH shows are the special awards made to outstanding individuals in the industry. We reported (SCAN Oct 86) on the SCAN Newsletter/AIM selection of Allan Gilligan, who received this year's Percival Award at SCAN-TECH/US in San Francisco, in recognition of his contribution to the industry. The Percival Award is made annually to someone from the user community.



The <u>Dilling</u> Award, also made in San Francisco, and honoring an outstanding vendor, was made to <u>Richard McDonald</u> of Data Composition. The selection of Rick McDonald was particularly noteworthy because of his achievements over the past two years as President of AIM/US. Under his stewardship, its membership has doubled and it has become an important independent organization representing the various automatic identification technologies. AIM/International has also grown under McDonald's leadership and includes organizations throughout the world. It was well deserved recognition of a job well done.

At SCAN-TECH/Europe in Basel, there was an extra measure of excitement when the recipient did not know he was to get the award until the actual announcement at the presentation ceremony. This happened when this year's <a href="SCAN Newsletter">SCAN Newsletter</a> Industry Achievement Award was made to <a href="Mark Marriott">Mark Marriott</a>, Numeric Arts, <a href="UK">UK</a>, for his work leading to the foundation and establishment of AIM/UK. This award is made to the individual in Europe who has made noteworthy contributions to the bar code scanning industry. His citation read in part: "He was the enthusiastic founder/Chairman of AIM/UK, moving the Association forward nationally, while contributing to broader international developments."

We are very pleased to be able to participate in the selection and award ceremony each year and to acknowledge the outstanding work done by individuals who help to shape the form and progress of this industry.

### A new device ....

....was informally previewed for us by Welch Allyn at their booth at SCAN TECH 86 in San Francisco. It is a small, portable (about 3" x 6") remote RF transmitter with a wand scanner attached. It transmits undecoded signals up to 350 feet from scanned bar codes to a receiver/decoder. The patented device (we couldn't find out what features the patent actually covered) is still under development and not available for sale. It is expected to have a list price of about \$800 for the transmitter and \$1,500 for the transceiver.

The company visualizes the unit being used at hospital nursing stations. Nurses can carry the transmitter in their pockets while on rounds and relay scanned information on-line, real time through the transceiver to the host computer. No word as yet as to when the product will be ready for the market.

Welch Allyn, Jordan Rd., Skaneateles Falls, NY 13153; 315/685-8351.

#### The lead-in to our article....

....on the systems capability of many of the bar code equipment vendors stated: "Nothing, it seems, turns on the top management of many companies in this business as the systems approach" (SCAN Nov 86). Well, it seems that the article did turn on two companies sufficiently to call us and register mild complaints.

Accu-Sort wanted to know why it wasn't included in the list of companies cited. It is an old established company in this industry and, according to General Manager, Steve Luszinsky, has been growing rapidly and profitably over the past few years (although it is privately held and figures are not available). Accu-Sort, says Luszinsky, definitely has been selling full system capability.

Computer Identics confirms that it has the systems approach as we indicated, but complains that we short-changed it by indicating the company's produce line does not include printers. "Not so," says Director of Market Development Chuck Mara. "We don't manufacture printers, but we do have a full line of dot matrix and thermal printers."

In order to comply with our fairness doctrine, are there any other "systems houses" that we've neglected?

# In view of the recent decisions....

....of the National Retail Merchants Association (NRMA) to adopt the UPC code and symbol (SCAN July 86, Sept 86), their next annual convention should be of particular interest to the bar coding industry. Unfortunately, the advance program lists only one short session on UPC, and we were surprised that only a handful of companies with bar coding products are listed as exhibitors.

The NRMA decision opens up bar code scanning to just about every retail establishment in the country. It will include slot, wand and hand-held laser scanners, printers, peripherals and software enhancements for the enormous data bases involved. We expect that this will become one of the largest growth areas in bar coding over the next 5 years and, unlike the supermarkets, installations will not be dominated by NCR, Datachecker and IBM.

We will be covering the show for our readers and will be reporting on the latest developments in our February, 1987 issue. NRMA Annual Convention and Business Exposition; January 11-14, 1987 at the New York Hilton and Sheraton Centre Hotels. NRMA, 100 West 31 Street, New York, NY 10017-0112; 212/244-8780.

#### The powerful movement....

....to establish automatic identification (UPC) at the front end of US department stores and mass merchandisers has a new driving wedge. We have been tracking this movement through the National Retail Merchants Association (NRMA), the National Mass Retailing Institute (NMRI), and the Crafted With Pride group (SCAN July 86, Sep 86). But some of the very important companies in the industry could not wait for the bureaucratic machinery to decide the critical technical — and political — issues that had to be resolved before real progress could be made.

Thus was born VICS — the Voluntary Inter-Industry Communications Standards Committee. This is an ad hoc group of retailers, apparel manufacturers, and textile manufacturers that was formed and first met (at the instigation of Roger Millikin) on June 6, 1986 in Chicago. Its goals were three-fold: To make UPC happen faster, particularly in branded apparel items; to set up communications standards (electronic data interchange); and to address the shipping container symbol standard for department store retailers.

The original ad hoc committee had 16 members including 8 retailers (Bullocks/Federated, May Co., Walmart, K mart, Sears, Carter Hawley Hale, Dayton-Hudson, and Penney); 5 apparel manufacturers (Levi Strauss, Maidenform, Vanity Fair, Blue Bell, and Haggar); and 3 textile companies (Milliken, J.P. Stevens, and Westpoint Pepperell). They formed a Steering Committee and a Technical Committee and they are moving ahead rapidly.

Each company is represented by executives from top management and operations levels. Research has been funded (each member company kicked in \$5,000 to the kitty) and Kurt Salmon Associates was retained in the United States and Brian French Associates in Europe. They will be exploring the retailers' file capacity to handle the code down to the lowest varient level; and whether the large number of variables in the apparel industry will "blow the system."

VICS is expected to submit its recommendations following its January 7 meeting, just prior to the annual NRMA convention. The unofficial word is that the standard UPC-Version A format will be retained in its present form. This group, without any formal mandate, can make its decisions stick because of the power of its constituency.

In some ways VICS activities are a throwback to the ad hoc UPC group, which was established in the early 1970's and which made the basic decisions for the implementation of that system. The very powerful corporate representation on the committee and the forcefulness of its individual members, cannot be taken lightly.

....NRMA press conference that Russ Adams (Editor, Bar Code News) attended on August 5, 1986 and which he referred to in his editorial in the November/ December 86 issue of his magazine. It is fascinating to see how we heard the same presentation, but came away with totally different conclusions as to the reasons and advantages that convinced the department stores to go with UPC. For example:

- Adams asks "Why not Code 39" which he says "is as standardized as UPC?"
  We believe that UPC's strength is that it is a standardized and rigid
  code as well as symbol, and that this has been critical to its success
  in retailing.
- Although it is true, as Adams points out, that the NRMA officers present at the meeting waffled on the question of which version of UPC would be adopted, this had not been a concern of their Board of Directors, when they made their decision a few months earlier. Versions A and E, as they currently exist, will be used until someone demonstrates good and valid reasons why they won't work. So far this has not happened.
- The fact that the UPC symbol will not include item pricing is not a factor in the selection of a symbol. It is a separate problem -- and always will be -- considering the rapid fluctuation in department store prices as a result of sales, mark-downs, etc.
- The argument that UPC cannot accommodate the current SKU numbers used by most manufacturers happens to be one of the major advantages of UPC in that it forces everyone into a common format, using non-intelligent codes. It's no different than what happened 13 years ago to supermarket suppliers who had to restructure their product numbering systems. They also learned that the intelligence belongs in the computer, not in the code.
- As for Sears adopting Code 39 (not yet a final decision as we understand it), theirs is a very special situation. Over 90% of Sears' merchandise is private label and, in effect, they are operating in a "closed-loop" environment.
- No mention is made in the Adams editorial of the very significant crossover merchandise sold in the department stores which is already source-marked with UPC; and also the fact that UPC has been up and running for a few years in department stores with hundreds of thousands of items maintained on accurate price look-up systems both in the United States and Europe.

If we sound totally confident that UPC will be implemented in the department store environment with no problems, we're not. We just believe that the retailers were fed up with no workable standard for so many years and adopted the most viable alternative available.

Let's compare notes, Russ, at the next press conference we attend together. Oh, yes -- and forgive this open letter response on our pages, rather than yours.

### One of the major driving forces....

....behind the efforts of the <u>Health Industry Bar Code Council (HIBCC)</u> to expand the use of machine readable codes, is the alarming statistic that between

5% and 20% of all drugs administered in hospitals may be in error. Any move to improve these figures would have an immediate impact on patient care and cost benefits.

With this background, the HIBCC sponsored a meeting of the <u>Unit Dose Focus</u>

<u>Group on September 3-4 and the results and proceedings are now available.</u> Among the major decisions reached at the meeting:

- Human-readable codes and machine-readable symbols should be placed on as many levels of packaging as possible, as soon as possible.
  - A unit dose package of 2" by 1 1/2" was deemed a suitable size to accommodate both the code and symbol.
  - Encodation and information density must be designed to sufficiently identify the product. Various coding schemes were presented.
  - Although fairly expensive to implement -- both by hospitals and manufacturers -- the cost benefits to both would more than justify the investment.

Although the forum concentrated on needs, problems and possible solutions, the clear consensus was that "if hospital pharmacists, pharmaceutical manufacturers, bar code equipment vendors and software developers continue to work together, the problems could be satisfactorily resolved."

The meeting, which was attended by representatives from each industry, and from their trade organizations, produced a list of 9 significant recommendations to move this project forward. We suggest everyone involved at any level obtain a copy of the complete proceedings (\$35 to HIBCC members; \$45 to others).

The HIBCC is planning a major show on May 6-8, 1987 in Atlanta, GA. The 1987 International Conference and Exhibition on Health Industry Bar Coding will replace the 3 regional conferences held in previous years. It will include over 30 educational seminars plus vendor exhibits

For both the Unit Dose Focus Group proceedings and information on the Atlanta conference contact: HIBCC, Box 4592, Chicago, IL 60680; 312/644-6610.

# After a fiscal year (ended 6/30/86)....

....with a 17% increase in sales (to \$3.2 million), but a drop in share earnings from \$.24 to \$.14, Imtec rebounded with both sales and earnings increases for the first quarter of fiscal year 1987: revenues = \$798,000; earnings = \$.07/share. The company is now back on track selling its primary product group of printer/applicators. Last year's sales were bolstered by its acquired line of dot matrix printers.

Imtec announced a proposed merger with Cardinal Computers in Lewisville, TX. Cardinal is a 5 year-old company that, among other products, has developed and is marketing a hand-held computer that prints out parking tickets. According to Imtec's president Jim Williams "Cardinal brings its software products, a bar code verification product line and knowledge of a key market area (Dallas, TX) to Imtec." In addition, Imtec is planning to raise \$1.5-\$2 million through a public offering for additional working capital.

#### There are now....

....two industry directories available listing sources for automatic identification products.

The 1986/87 Automatic Identification Manufacturers & Services Directory published by ID Systems (a/k/a Bar Code News), is now out and available. This is the fifth year of publication, and this year's directory lists 351 companies (up from last year's 305) with cross reference indices. Copies are available at \$49.95 from ID Systems, 174 Concord Street, Peterborough, NH 03458; 603/924-9631.

The 1986 Reference Guide and Directory from <u>Automatic ID News</u> is a brand new publication. It contains a great deal of valuable information about a large number of suppliers of automatic identification equipment, supplies and services There are 350 companies listed and cross referenced by technology, application, products and brand names. There is no index or table of contents, which makes it difficult to use as a quick reference; and the vendor profiles tend to be a little sketchy. As a first effort, however, it's a welcome addition to our book shelf. The directory is free from Automatic ID News; 7500 Old Oak Boulevard, Cleveland, OH 44130; 800/225-4569.

#### In a move to expand....

tising range, <u>Bar Code News</u> is changing its name to <u>ID Systems</u>: <u>The Magazine of Keyless Data Entry</u>. The decision was made, according to publisher Laura Hanson, to reflect "a heightened recognition that the automatic identification universe is becoming tougher to label, more difficult to limit." The change will become effective with the January, 1987 issue.

The magazine is moving ahead with its second ID Expo Conference and Exposition scheduled for March 25-27, 1987 at the Long Beach (CA) Convention Center. For more on the show: Expocon Management Associates, 3695 Post Road, Southport, CT 06490; 203/259-5734.

Another conference to be noted on your calendars will be held on January 27-28, 1987 in Atlanta. This one is sponsored by Clemson University, College of Commerce and Industry, and will include a dozen presentations. There will be sessions on the basic bar code scanning technology with additional emphasis on applications in a manufacturing environment directed toward the technical personnel involved in operations. To register: Ms. Kay Jones, 806/656-2200.

# We're sure you all spotted....

....the error on page 5 of the October 1986 issue, but we'll mention it anyway: The <u>POSitalker</u> retail talking scanner is a product of <u>Datachecker</u> and not NCR. NCR has their own talker and there is one installed with the unit at their supermarket in Morrow, GA (as we reported). It is just that Datachecker Marketing Manager Tony van Seventer doesn't want that one to be called a POSitalker.

SCANNING, CODING & AUTOMATION NEWSLETTER. 11 Middle Neck Road • Great Neck, N.Y. 11021 • 516/487-6370 Published monthly. PUBLISHER/EDITOR: George Goldberg; CIRCULATION DIRECTOR: Teddy Allen. INTERNATIONAL EDITOR: Paul Chartier • P.O. Box 7 • Cirencester GL7-1JD England • 285-3011