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

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The list of speakers....

....for the application subjects for <u>SCAN-TECH Europe 84</u> has been finalised. Representatives from major industry users will review their bar coding and other successful automatic identification operations:

- Automotive industry -- Emmerich Christiansen, Ford Werke AG, Koln, West Germany will talk of applications in production and vehicle distribution.
- IBM as a major user -- Ivan Kimisky, IBM (UK) Ltd., Greenock, Scotland will speak on applications in assembly, test and warehousing.
- Work in progress in electronics -- Anton Gieles of Philips, The Netherlands will discuss various methods of product identification using bar codes and radio frequency.
- Food distribution -- Richard Falkingham, Rowntree Mackintosh, York, England will present a study of the use of bar codes from finished goods at the factory to delivery at local depots.
- Bar codes in pharmaceuticals -- Jacques Fournier, Club Inter-Pharmaceutique will explain why the French industry has adopted bar coding and the benefits they have gained.
- Mail order -- Mr. Brier, Neckermann Versand Ag, West Germany will discuss the use of bar codes on packages from goods receiving and pre-sorting, to returns and reassignment.
- Military applications -- Mr. Kotlowski, HG USAREUR, Heidelberg, West Germany will discuss the implementation of bar codes in military systems in Europe.
- The importance of quality control -- Arne Heine, Optiscan AB, Solna, Sweden will review the quality assurance aspects in bar code systems.

This represents a varied set of applications to complement the technical subjects that are also scheduled (SCAN I/E Aug 84). Although 45 companies have

now booked as exhibites, there is space available be re the organisers can claim a sellout of the exhibition. SCAN-TECH Europe 84, Amsterdam, The Netherlands, 6-8 Nov. Details from: SCAN-TECH Europe 84, International Secretariet, The Old Vicarage, Haley Hill, Halifax HX3 6DR, West Yorkshire, England.

The number of scanning stores....

....in France has increased by 60% since February 1984. The latest figures from Gencod -- the French EAN affiliate -- show that at the end of May 1984, there were 283 scanning stores (176 in February):

France - May 1984

Equipment Suppliers	EAN Scar	EAN Scanning Stores	
	Stores %	Checkouts %	
Sweda	36.4	33.2	
NCR	23.0	32.6	
IBM	12.0	11.2	
Olympia	7.8	5.7	
TEC	6.7	8.9	
Others (7) Includes DTS and Hugin	14.1	8.4	
Total	100.0	100.0	

Two chains accounted for over a quarter of the installations: Codec has 54 stores (28 in Feb); Leclerc has 35 (22 in Feb). It is notable that 60% of the stores use light pens; 9% use other hand-held devices; and flat bed (slot) scanners account for the remaining 31%. This is not due to any bias towards smaller convenience stores, since almost 200 of the French scanning stores are over 400 square metres (4300 sq ft), and surprisingly, the majority of these supermarkets and hypermarkets use hand-held devices.

Included in these figures are 32 scanning stores in the general merchandise sector: auto accessories, fabrics, sports stores, book stores and others. Across all sectors, the average number of checkouts per store is almost $6\frac{1}{2}$. Predictions for the year end suggest that the number of scanning stores will reflect yet another 60% increase on the May figures.

Recent conversations with....

....Michel Grolee -- General Manager, Master Code International (MCI) -- have given us a better insight into some aspects of the bar code industry in France. Information about MCI also provides some indication of the structure and workings of the industry.

MCI is a recently-formed subsidiary of DIHP, a larger company manufacturing printed circuit boards and using photoplotters to produce film masters. MCI was set up to market this output; previously DIHP had marketed directly. Michel Grolee, whose background includes six years with Gencod, the French EAN affiliate, now heads a team of 12 people.

The business goals of MCI include the provision of a comprehensive service of bar code technology to its customers. In addition to providing film masters, MCI has established a series of non-exclusive distributorships in order to offer a variety of equipment: six different bar code printers, five reading devices

(scanners and light p), four portable terminals. User these agreements, MCI may even handle products which would otherwise be thought of as under an exclusive distribution arrangement elsewhere. (For example, MCI offers Intermec products, which are handled exclusively by Intermec Systemes.) According to Grolee, the flexibility of being able to offer competitive equipment "enables MCI to help our clients to choose the best equipment suited for their business". It is also of benefit to MCI's supplier, because it increases sales for a company which may have the right product but not the entry into a particular market.

Grolee describes the market for film masters in France is still expanding, but there is fierce competition between four major suppliers. MCI's film master sales are stated to be 3 million FF (\$350,000) for 1984. Competition has depressed the price to 120 francs, and in some cases much lower — to a level which Grolee says is probably the lowest in the world. MCI and its competitors are therefore seeking — and finding — export markets.

Master Code International, 12 rue du 4 Septembre, 92130 Issy-les-Moulineaux, France; French 'phone: 01 644 03 03; Telex 203 984 F.

Eliza Doolittle was not....

....the only one to have trouble with her "H's". If you are a fan of G. B. Shaw, you will recall that the young girl from Pygmalion, who was groomed to become My Fair Lady, had trouble pronouncing words beginning with "H". There is a similar controversy in EAN circles about printing and interpreting the proposed H print gauges on the ITF bar code used on outer cases.

After a printer completes his test, using the print gauge, particular values of two H gauges are determined and placed in the bottom corners of the symbol. If ink spread is greater than expected, the space between the uprights will fill; if much less than expected the space will be over-wide. The system is intended to provide for a simple visual check to monitor the quality of the bar code, but no one can agree on the proper way to use the gauge.

Print gain is assessed on a scale of 0 to 7. For example, in evaluating a sample run of a group of H's: if H1 and H2 were filled; H4 to H7 had verticals which were quite distinct; and H3 verticals were just touching, the rating would be H3. Other samples would be assessed and the range of ratings determined. If the observed range was H2 to H3, what should be the value(s) of the two H gauges on the ITF-14 bar code film master? Some say H3/H3; others H4/H4; and still others recommend H4/H2.

You may need to think about the arguments and study the specifications before reaching an opinion. The issue is not which is right, but that the disagreement should arise at such a late stage, after the international specs have been published.

Codeway has announced that

....it is now the exclusive UK distributor for the Japanese Opto-Electronics' MSH 400 and 500 series of light pens. Looking a little like an OCR wand, the device can come complete with the decoder on a chip encased within the handle. The publicity material describes it as "a complete bar code reading system in the palm of the hand".

A range of device specifications are available: four dot resolutions of .18mm; .25mm; .30mm; .40mm; two light sources, 660 nanometre visible light and 900 nanometre infrared. The MSH 400 series of hand scanners can read in a non-contact manner and cope with bar codes on flexible or uneven surfaces. The product is available in small quantities at £300 (\$400).

Codeway plans to supply the OEM market as well as its own end-user customers. The agreement with Opto-Electronics allows Codeway to market overseas where Opto-Electronics is not represented. Also available separately in OEM quantities only, is the CMOS single chip decoder for use with other devices Codeway supplies. Codeway has a new address: Codeway Limited, 1 East Stockwell Street, Colchester COl 1SR, England; UK 'phone: (0206) 576676; Telex: 987562.

As a step....

....in the direction of making greater use of automation in its operation, F. W. Woolworth -- now a separate business operation in the UK -- has just placed a large order with Telxon Limited for equipment. Telxon has already supplied the first units of an order for 1,000 Model 716 terminals, together with modems, bar code scanners and portable printers for Woolworths to install in all of their stores. John Cribb, Managing Director Telxon Limited, claims that "this is arguably the largest single order to be placed for portable data capture terminals in the UK."

The equipment forms part of a system which Woolworths has installed to automate order placement of warehouse-supplied lines and will be used for backroom and counter stock. Initially, an interleaved 2 of 5 bar code version of Woolworth's internal product code will be read. The facility exists to upgrade to EAN data capture at some future date.

Every now and then....

....we pick up details of a bar code application from around the world which captures our imagination. This month we have come across an implementation in Israel which is used to prepare the wages of workers in an avocado pear packing station. The workers' pay is based on the number of boxes packed, taking into account the kind and size of fruit -- about 60 variants in all.

Previously, each packer placed an identification label in each four kilogram box as it was packed. A checker entered this ID manually into the computer, together with the details of the fruit. Now, both aspects are automated. The packer affixes two bar codes to each box: one identifying the fruit, the other identifying the packer.

Symbol Technologies' Laserscan 4100 scanners are positioned on each of four conveyors, and each copes with 1500 boxes per hour, which is the output of 10 packers. Details are scanned to prepare the data to make up the wages. Detection of errors (two of the same label, only one label, and so on) causes the conveyor to be stopped and the situation rectified immediately. The elimination of human errors was the main reason for installing the system. To cope with a planned increase in production, the packing station is installing four more conveyors, all with Laserscan 4100.

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