The key element to the new system....

....installed by Federal Express Corporation, as part of their order tracking system, employs the Norand Alpha-1 hand held bar code scanners. The initial order by Federal Express to Norand calls for the delivery of 462 of the portable scanners valued at approximately $1.1 million.

Initially the system will be used at the Federal Express city stations or central collection points. Ultimately, if it works as expected, the two companies indicate that it could be expanded to as many as 3,500 terminals for a total of $7 million in equipment. That would then involve equipping each of the 3,000 couriers with Norand terminals on their vehicles. (This is the largest single-company order of scanners we have ever heard of.)

The system is planned for implementation in early 1981. The Federal Express bills of lading are already printed with a 10-digit Codabar symbol in the upper right-hand corner. Federal Express uses almost 90,000 bills of lading daily and has received over 8 million of these five-part documents. Each part is printed with the same bar code but every document has a different number and symbol. The preparation of these forms and the associated printing of quality, scannable bar codes has been a major task in itself. Ink-jet printing was tried but did not prove satisfactory in its initial tests. Currently, special impact printers with rotary wheels are being used by General Business Forms, and other sources are being explored. It is expected that 70 million such forms will be printed by the end of this year.

Norand is aggressively pursuing this market, seeking leadership through direct sales or by establishing distributors. The company is system oriented and provides programmable terminals and printers with front-end portable bar code reading equipment capable of handling Codabar, UPC, Plessey, 2/5, Interleaved 2/5 and Code 39. They are also completing an EAN module for the international markets.

The company worked for 18 months on the Federal Express project, and the customized system sale certainly represents a coup for the company. Norand Corp., 550 Second St. SW, Cedar Rapids, IA 52401; 319/366-7611.

The Photographic Sciences/RJS Enterprises....

....dispute (SCAN Oct 80) has been settled. The joint statement issued by the two companies states "The Autoscan and Veriscan verification equipment
will now be sold directly by RJS Enterprises." Photographic Sciences has completely withdrawn from sales or maintenance, including previously installed equipment. Harry Palmer of RJS states that he will be marketing the Autoscan directly and will service all existing installations.

RJS (Monrovia, CA) has introduced a new cassette-loaded verification model with programs for Code 39, Interleaved 2 of 5, and Supplemental Codes in addition to the standard UPC/EAN. Current models can be upgraded to include these new capabilities. The company also plans to introduce a new unit early next year which will scan the larger symbols that will be used for the distribution symbol. The current models are restricted in size to a maximum of about 3 inches (200% magnification of UPC).

We have had to assign...

...a full-time staffer just to keep up with the flow of news out of MSI this month:

- The second quarter (ended September 27, 1980) financials showed a 22% increase in revenues to $13,511,000 from a previous year's $11,107,000. (For the six months the increase was to $25.6 million from $21.1). Income from continuing operations rose 39% for the quarter to $851,000 ($37/share) from $612,000 ($27/share). These figures do not include the operations of the Chase Computer Corporation which the company divested earlier this year. The company also declared a quarterly dividend of $.10/share, its 15th consecutive quarterly dividend.

- MSI reports the sale of 1,000 MSI/88E Portable Data Entry Terminals to Grand Union Company, its largest order to date for this advanced model. The terminals will be used for electronic order entry and retail-price auditing by Grand Union and for other applications starting next year. These terminals will replace older MSI models now in use by the large supermarket/retailer.

- Another major sale was reported to Max Factor, the cosmetic and fragrance company. It consisted of 283 MSI/88E Portable Data Entry Terminals which will be used by the company's sales force to electronically transmit orders from the field. Max Factor claims "The new method will cut 7 to 10 days off the time it takes to get an order in the system and improve turn-around time to the customers by 40-50%".

- MSI also announced the introduction of two new products: an economy-priced optical wand scanner to be used with the Model MSI/66 Portable Data Entry Terminal. This unit is designed for low to medium volume collection of bar coded and conventional numeric information for electronic order entry and inventory management systems. It is now priced at $600-700 depending on memory size. Also introduced is the Model 2732-S data communications receiver with store and forward capability. The unit will serve as an interface between MSI's Portable Data Entry Terminal and host computer and is priced between $9,000-14,000 depending on disc capacity. Existing 2732 models may be upgraded to the "S" function.

- The Costa Mesa, CA company has made a number of personnel appointments and changes, including Carol Gillespi to the new post of Corporate Counsel and Secretary; Patrick Dillon to be Director of Employee and
Community Relations; Charles Bush as Vice President, Program Management
to direct the company's development activities for selected new portable
data entry terminal markets; and Richard Braille promoted to Director of
International Sales and Support.

Interface Mechanisms announced....

....its intention to sell 200,000 shares of its common stock to the public.
Registration with the SEC is scheduled for November 1980. The purpose of the
public offering, according to the company, is to reduce short term bank borrow-
ings and increase its capital to support future growth. (Intermec's NASDAQ
closing quote on 10/31/80 was 16 3/4.) Principal shareholders may sell addi-
tional shares.

This announcement follows the release of strong second quarter financial re-
results with revenues up 68% and earnings up 115%. For the period ended Septem-
ber 30, 1980, net income was $.21/share vs. $.09/share last year. Revenues
were $3.8 million compared to $2.1 million for the previous year.

For the first half of fiscal 1981 the company reports net income of $658,890
($.34/share) on $6.9 million revenues. This compares to $329,534 ($.17/share)
and $4.1 million for a similar period last year.

Intermec has also introduced its new model 9400 Portable Bar Code Reader with
industrial applications to include inventory control in plants and warehouses,
data collection in agricultural and forestry experiments and office applica-
tions in libraries, hospitals, banks and insurance companies. The model 9400
is geared to read variable length Code 39 up to 32 characters long. It has a
solid state memory capacity of 20,000 alpha-numeric characters and the user may
select between a belt clip and shoulder strap to conveniently carry the unit.

A direct result of the successful establishment....

....of UPC coding of supermarket products is the new Uniform Communications
System (UCS) now under study by the industry. UCS will be a major step for-
ward in the automation of supermarket operations. It involves a computer-to-
computer ordering system based on direct communications between the retailers
and their suppliers and utilizing standardized UPC product identification.
UCS will be separate and apart from the UPC system and will not require that
a store have a scanning installation. It projects significant cost savings
and improved efficiency.

A Joint Industry Committee is now in place and functioning and Len Lieberman of
Supermarket General Corporation (Pathmark Stores) and Arthur Woelfle of Kraft
Foods have been selected as co-chairmen for the duration of the 18 months'
pilot and implementation program. Touche Ross has been hired to conduct the
implementation based on the initial study completed by Arthur D. Little, Inc.

The time-table calls for the development of uniform message contact content
and structure by June 1981; pilot program implementation by December 1981;
and industry-wide implementation beginning in 1982. Full-time personnel
will be assigned to the four major committees which are Message Standards,
Communications Standards, Industry Relations, and General Organization and
Pilot Implementation.

Scanning, Coding & Automation Newsletter
The third quarter 1980....

....UPC scanning scoreboard for the US and Canada wound up like this:

<table>
<thead>
<tr>
<th>Aug/Sept 1980</th>
<th>Total 9/30/80</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
</tr>
<tr>
<td>NCR</td>
<td>155</td>
</tr>
<tr>
<td>IBM</td>
<td>65</td>
</tr>
<tr>
<td>Datachecker</td>
<td>36</td>
</tr>
<tr>
<td>Sweda</td>
<td>20</td>
</tr>
<tr>
<td>Data Terminal Systems</td>
<td>32</td>
</tr>
<tr>
<td>DataCash</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>308</td>
</tr>
</tbody>
</table>

Of special interest:

- Note NCR's 50%+ share for the two-month period.
- There is at least one UPC scanning installation in each of the 50 states plus the District of Columbia. (Alaska has 21 scanning stores!)
- The top 10 scanning retailers, led by Winn-Dixie (229) and Publix (221), have 1,153 scanning stores for 43.5% of the total.

The on-again, off-again....

....use of UPC-scannable coupons is inching forward very carefully. The patent situation remains unclear. The most recent decision by the Patent Office upheld the Uniform Product Code Council position that Walter Kaslow's patent is not valid. Kaslow, however, is pursuing appeals with the Patent Office and still plans to pursue this through the federal courts.

Pillsbury, General Foods and Ralston Purina are actively exploring the possibilities of using UPC symbols on consumer coupons. The potential for reduction of coupon misredemption, lower handling costs and more accurate information has finally proved too tempting to permit the stalemate to go too much longer. Bar code symbols are now being printed on coupons.

Although the manufacturers are proceeding with their tests, there is not too much activity as yet on the problems that will face the scanning supermarkets and their hardware suppliers. The manufacturers of scanning systems are still maintaining a "wait and see" attitude. Most declare that the system is feasible but they have not made full system capability available to the industry. Data file cross-referencing and maintenance will present significant problems that have to be worked out. Even though coupons may group items for which they are redeemable, entry into the data file may require additional capacity, new programs and increased file maintenance.

Obviously the grocery manufacturers are not following the lead of Giant Foods, the major retailer, which released studies indicating that coupons are discriminatory and not cost effective (SCAN Jun 80; Jul 80). The use of consumer coupons is still growing rapidly with projections that over 100 billion such coupons will be issued next year. With over 3,000 scanning stores by the end
of this year, coupon-scanning is starting to look more and more attractive to the promotion-minded manufacturers.

Some quotable quotes....

....from the excellent Advertising Age special edition on Market Research (October 1980):

- "Supermarket scanning systems are an early example of the capability the research industry will have of capturing behavior as it occurs. Reactions and attitudes will be monitored, transmitted and analyzed in almost zero elapsed time."

- "The Universal Product Code may have more effect on the measurements of advertiser's effect on sales than any other measurement to date; it may mean new understanding of how advertising works."

- "In the 1980's computer capabilities to generate data will...outstrip the human analytical ability to digest these data."

- "The most pressing problem today is learning how to cope with the deluge of data that will soon come gushing in ever increasing quantities from the checkout counter in retail stores. When daily sales data becomes available brand by brand, product managers will be pushed toward short-sighted, short-term expediency (which) would encourage the worst features of advertising and marketing practices."

All of the above quotes were in contemplation of the future of market-research as related to the impact of scanner data from the supermarkets. And of course the market research companies are well aware of these developments and have been rapidly expanding their activities.

A.C. Nielsen Co., the largest market research company in the world, has announced its "Nielsen's National Scantrack Service" based, the company says, "on a carefully selected nationwide sample of high-volume scanner-equipped supermarkets."

Tele-Research, which maintains that its Trim Service is the "leading name in scanner-based market research", announces that effective December 1, 1980, their scanner store coverage will be expanded to an additional 15 cities from the eight locations now covered.

SAMI, a division of Time, Inc., is moving ahead with one of the most ambitious programs of all. SAMI is gathering information from consumer panels and store data in the three cities of Portland, ME, Orlando, FL, and Evansville, IN. Purchases by the consumers are related to controlled advertising, with separate messages to each panel group delivered by split-cable-TV, special newspaper insertions and targeted direct mail. The Orlando setup will include the ability to electronically poll each member of the panel every eight seconds with two-way cable communications to see which TV sets are turned on and to which channel. SAMI has been meeting with and coordinating their activities with consumer groups in each city. Their many-faceted service will seek to report the purchases and the motivations behind each purchase by their consumer panel.
The excellent EAN newsletter....

...of September 1980 contains an overview of the activities of the 15 EAN member countries:

- There are 35 EAN scanning stores including 2 in France (13 lanes); 16 in Germany (173 lanes); 6 in Italy (58 lanes); 4 in Japan (24 lanes); 1 in the Netherlands (7 lanes); 1 in Norway; 1 in Switzerland; 4 in the UK (64 lanes).

- A breakdown of the hardware suppliers shows IBM well out in front:

<table>
<thead>
<tr>
<th>Stores</th>
<th>Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM</td>
<td>251</td>
</tr>
<tr>
<td>NCR</td>
<td>45</td>
</tr>
<tr>
<td>Nixdorff</td>
<td>18</td>
</tr>
</tbody>
</table>

Plus 1 store each by DTS, RTI, Matsushita, OKI and C & C.

- There are 6,312 member companies of which 4,364 are manufacturers.

- The EAN Executive Committee has issued a specification for the coding of random or variable-weight items.

- There is still a great deal of concern that those manufacturers exporting to the United States must put the UPC symbol on their products and not the EAN symbol. The slow movement by the hardware manufacturers to incorporate EAN into the US/Canada installations remains an aggravation to the EAN Councils.

The second meeting....

...of the American National Standards Institute (ANSI) sub-committee on coding and labeling is scheduled to be held on November 13, 1980 at Tobyhanna Army Depot. Mike Noll, Chairman of the sub-committee, reports that there has been good industry response to the work of the sub-committee and that membership now consists of individuals from 30 different organizations. This meeting will be held to discuss the results of some of the initial work assignments made to various committee members.

For those who are following the....

...issue of item-pricing removal and UPC scanning, Giant’s attempts to remove item prices in one of their Maryland stores has triggered a movement to legislate against it in the District of Columbia. Meetings were held to oppose the removal of item-pricing and to introduce legislation forbidding it. The negative groups sponsoring the meetings included consumer and labor organizations. Meetings held by the company’s management and the opposing groups were not very successful, and did not seem to change anyone’s mind.