LONDON EXCHANGE BUYS

Telex Wireless Mics

IN the exciting world of high finance, TCI Products are fast becoming a vital link in worldwide communications.

Take the example of the London International Financial Futures Exchange (LIFFE) opened in 1982 in London's Royal Exchange Building. LIFFE, with a current average monthly trading volume of over £200 billion, (about $358 billion as of this writing) was established to provide a market within the European time zone offering financial futures, and options, to dealers and investors worldwide.

LIFFE recently decided to enhance trading communication — still carried out on an "open outcry" basis. LIFFE Systems Manager, Neil Blurton, decided that a wireless microphone system would be the most effective means of continuing the essential contact between floor observers and reporters in the gallery area who feed the communication into the LIFFE computer system and consequently, into the worldwide financial marketplace.

After evaluating a number of wireless systems, the Telex Wireless Mic was found to be the most suitable and reliable for use in such a noisy, hustle

TCI wireless microphones aid the whirlwind bargaining efforts at the London International Financial Futures Exchange.

and bustle environment. To date, LIFFE has 10 Telex systems in operation comprising both the PH-20 headworn microphone and the WT-200 belt pack transmitter worn by the floor observers with an FMR-50 non-diversity receiver in the gallery.

According to Blurton, the Telex wire-less systems give the observers the freedom of movement they need. Blurton added that TCI's product reputation for reliability was appreciated and essential in this environment where relaying current market prices and fast-paced transactions are critical. ▪

PRESIDENT'S MESSAGE

FOR three years in a row on the day of our daughter's birthday, we were deep in the mountains on our annual family backpack trip. Therefore, Julie always received wildflowers, pinecones, unusual rocks, and occasionally a fish for her birthday presents. The birthday dinner was usually dehydrated camp food with dried fruit and nuts for dessert. She was always very cheerful about the situation and, eventually we had a "make up" party later at home.

However, on the fourth year, I was determined to celebrate Julie's birthday in camp with a chocolate cake and candles. To this end, I carried in my pack the cake mix, candles, and a piece of aluminum foil that I planned to fold into a "make shift" cake pan.

After six days of hiking, the time finally came to bake the cake. Thus started a practical lesson in determination, humility and success.

A few curious cousins of our children gathered to watch. The first challenge came quickly. Obviously, I had not read the instructions in advance. The cake mix called for an egg and a cup of fresh milk. The closest substitute I had for the egg was a dried spanish omelette mix that I was saving for breakfast. I thought to myself "surely the chocolate will be stronger than the chili pepper in the omelette." In went part of the omelette mix. Powdered skim milk and water solved the fresh milk requirement.

The crowd of onlookers had grown. I squared off the corners of the alumi-num foil and formed the cake pan; poured in the mix, and placed the pan in an "oven" I made by placing several flat rocks together in the shape of a box. Soon, I had a good sized fire burning around the "oven." There was no question that my childhood scoutmaster would have been pleased to know that I still remembered how to do this trick.

While the cake was baking, I walked back down the trail where I had earlier seen some wild strawberries. I thought, "What could be better than strawberries and chocolate cake — besides that, the strawberries might help kill the spanish omelette taste." When I found the strawberries, the "larger" ones were about half the size of a small shirt button, and then there were the "smaller" ones. After 30 minutes, I had collected only about one half cup, but I felt that even this amount might help the cause.

When I got back to the fire, I saw that the cake was badly burned on one side, completely fallen in the middle and just getting warm on the other side. By carefully rotating the pan, I successfully burned the far side and the center fell even lower. I had to admit that this cake would never win any prize at the county fair.

On the other hand, I remembered that the family had been hiking for six days and all of our teenagers had long before eaten their last twinkie and chocolate candy bar. I also remembered

M MEMOREX TELEX

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the advice I often give our Company sales force, "Sell what you have currently in inventory, not what you wish you had."

So, I stirred together the burnt edges and fallen center, mixed in the strawberries, put on the candles, and declared with an air of authority that Julie's chocolate strawberry birthday "mousse" was ready to eat. We all sang "Happy Birthday," she blew out the candles, and much to everyone's surprise (including my own) the "mousse" was not too bad. In fact, within 10 minutes, it was completely eaten.

George L. Bragg

My daughter smiled and with wisdom far beyond her age said "The good taste was only exceeded by the love behind the cake." And, with that, she happily examined her new birthday presents . . . a collection of wildflowers, pinecones and a pretty new rock.

Why this story? One of the first attitudes we should develop in life — and in business — is a sense of direction and purpose. And, if we are to be happy in our pursuit then, we need very quickly to develop a sense of humor. No matter how hard we try, we will all have those days when even "Dial A Prayer" answers, "Sorry, you have reached a disconnected number."

When we, either personally or as a company, have times like this, it helps to remember that determination, creativity and a sense of humor might change your burned chocolate cake into an acceptable chocolate strawberry mousse. At least, if you try, you may learn something new, and for certain, you will never forget the experience.

Distributor Program For Digital PBX Line Revealed

IN mid July, Memorex Telex announced a distributor program for its 1001 digital PBX line. Concurrently, the company announced that seven distributors have agreed to represent the 1001 digital PBX line in their territories. Memorex Telex will continue to sell the 1001 through it's direct sales force in major metropolitan areas.

The new distributors are Terra Telecom (Tulsa, Oklahoma), Omega Business Communications Inc., (Colorado Springs, Denver and Pueblo Colorado), Executone (Ottawa, Canada), Network Test Systems (Van Nuys, California), MCI-Multinet Communications Inc., (Montreal, Canada), American Tel-Com, Inc., (Hawaii), and Versatel (Vancouver, Canada). Memorex Telex will continue to add to this distribution network.

"A strong distribution network is the key to serving our market," said Roy King, Executive Vice President for Memorex Telex Systems. "It provides representation in areas where we have no sales presence, thus complementing our market coverage. The dynamics of today's business with its complex, decentralized communications requirements, dictate how we must support our customers," King explained.

Murrell Worth, Distribution Sales Manager for North America, said, "The distribution agreements cover the entire Telex 1001 product family." A modular system, the 1001 is capable of growing from 40 to 2,500 lines, and consists of five models: the 1001VS (very small), 1001S, 1001M, 1001L, and the 1001VL (very large).

One of the first integrated voice and data PBXs to be marketed, the Memorex Telex 1001 is a fully digital, non-blocking system. "Since its introduction in 1982, it has been at the forefront of PBX innovation and technology. One of the very first PBX's to have integrated voice and data on each port, it also introduced such concepts as fully configurable telephone face plates and most recently a fully integrated automated attendant," Worth said.
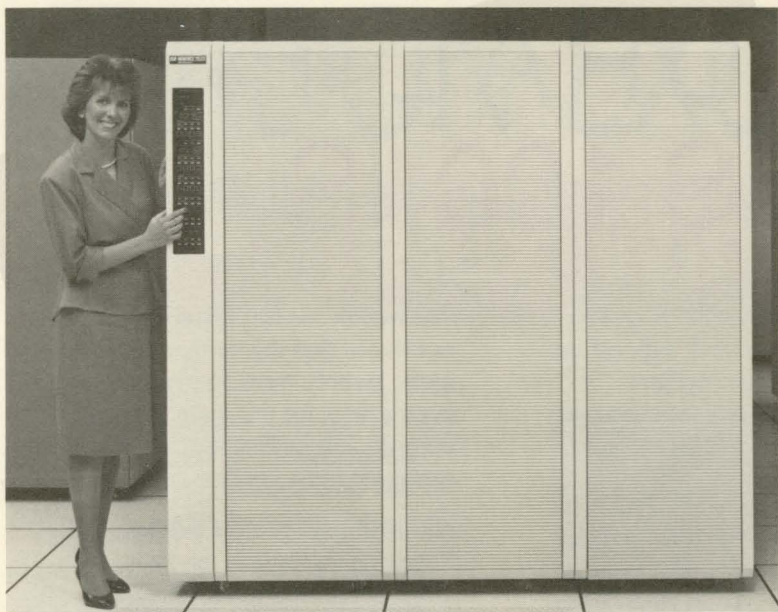
3890
DASD Storage Subsystem Heralded

ON July 18, Memorex Telex announced the 3890 DASD storage subsystem, the latest generation of on-line magnetic direct access storage devices for the IBM plug-compatible marketplace (PCM). In keeping with its market strategy of providing its customers with IBM-compatible products that outperform the competition, from both a price and performance vantage, Memorex Telex introduced the 3898 storage control units (SCU's) — models 1, 1A, and 2, and the 3890-01K4, 3890-02K4, 3890-01J4 and 3890-02J4 disk storage modules.

"This product offering represents a major step forward for Memorex Telex as a provider of storage equipment to the IBM PCM marketplace," commented Alfred T. Mockett, vice president of U.S. Sales and Service for Memorex Telex. "In the process of providing our customers with the proper product alternative, we looked toward the issues and needs associated with today's data processing environment, identified the proper technology to meet those needs, and provided cost-effective solutions. In introducing the 3898 storage control units,

Memorex Telex is able to offer its customers superior performance and more product features in a more attractive package, all of which will benefit the data processing community," Mockett explained.

In a departure from prior generation 14" platter products, Memorex Telex has selected 8" disk drives as the core of its disk storage modules. Increased reliability, decreased power requirements and lower heat dissipation, as well as highly competitive performances can be seen as the basis of this disk drive selection. "Current technology trends indicate that greater advantages can be obtained using 8" platter technology, said Bob Bodnar, director, Storage Product Marketing. "The Memorex Telex 3890 DASD system offers four times the storage capacity per square foot of computer room floor space when compared to IBM 3380 "K" disk drives. This results in 'quadruple the triple' capacity when compared to IBM 3380 K's in terms of megabytes per square foot, providing our customers with an unparalleled technological footprint advantage," Bodnar said.

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The new Memorex Telex 3890 DASD storage subsystem is the first truly "rack mounted" large storage device.

The 3890 DASD system is packaged in convenient rack mounting, benefitting users, both in decreased time to repair, and in the reduced service area required for their DASD systems.

Delivery of the 3890-1 storage control unit and 3890 J and K disk drives is scheduled for the first half of 1989. Delivery of the 3890-1A storage control unit is scheduled for third quarter of 1989, while delivery of the 3898-2 storage control unit is scheduled for early 1990.

The 3890 DASD Subsystem is user priced at $428,000 for a 30.24 gigabyte configuration of a two director 3898-1 Storage Control Unit and two 3890-02K4 DASD units.

Memorex Telex Introduces

AUTOMATIC CARTRIDGE TAPE LIBRARY SYSTEM

MEMOREX Telex recently announced the introduction of the 5400 Automatic Tape Library (ATL). This major advance in the automation of cartridge tape handling for IBM and IBM-compatible mainframe systems builds on the proven technology and excellent performance of the Memorex Telex 5480 cartridge tape subsystems.

This announcement is the fulfillment of months of collaboration between Fujitsu and Memorex Telex, since a joint statement of direction was first made in November 1987 by both companies committing to the announcement of a cartridge tape library during 1988.

The 5400 ATL takes the design of cartridge tape libraries into a new second generation, addressing more specifically a range of user needs not satisfied by first generation products.

"Memorex Telex listened carefully to our customer base and to market reaction to the first generation of cartridge library systems. The result is a system bringing a fresh level of emphasis to the requirements for modularity, availability and throughput," said Alfred T. Mockett, executive vice president of U.S. Sales and Service with Memorex Telex Corporation.

The design and unique features of the 5400 ATL now more directly address the key needs of cartridge tape automation and make cost effective library systems a reality," Mockett said.

The Memorex Telex 5400 ATL, which is of a linear design incorporates a track along which two automatic accessors travel. The track is bordered on both sides by a honeycomb-like structure containing the cells into which the cartridges are stored by the accessors.

The cartridge tape drives and their controllers are contained in cabinets behind the rear row of cells. Cartridge access to the drives is through openings set in the cell structure.

Many Configurations

The Memorex Telex 5400 ATL is available in a wide range of configurations starting with an entry level subsystem capable of holding 658 cartridge tapes. ATL subsystems can be configured in increments of about 600 cartridges to a maximum of 5,152 cartridges. The ATL is field upgradeable.

This system modularity allows Memorex Telex to approach a much wider range of users than first generation devices and to propose solutions specifically tailored to meet individual customer requirements.

The ATL has been designed as a failsafe system. Its full component redundancy ensures that the failure of any single component will not prevent automatic tape processing from continuing, even through the diagnostic and repair process.

A particular example of this approach is the inclusion of two robot accessors in every ATL. Apart from affording the potential for greater throughput, two accessors give the ATL the ability to operate efficiently with only one accessor should the other require servicing, presenting an unbeatable level of system availability.

The advanced mechanical and electronic design of the Memorex Telex ATL is fully complemented by software containing a comprehensive range of library management functions and facilities.

Intelligent Library Manager

The intelligent library manager (ILM) software is an analysis and simulation tool used by Memorex Telex systems engineers to analyze the precise profile of tape usage at an installation and quantify the optimum ATL configuration required to handle the tape activity with minimal operator interaction.

Additional software utilities manage the contents of the library dynamically on a regular, ongoing basis.

The net result is that more than 90 percent of the benefits of installing an automatic library large enough to contain all the tapes in the installation are obtained by using dynamic library management. The dynamically-managed library may be only 20 percent of the size of a conventional library containing all tapes on the site.

Available in over 30 different configurations, the 5400 ranges in prices from $370,000 to $930,000. The 5400 ATL pricing includes the library storage and dual robotics and 5480 tape cartridge subsystem hardware and software. First shipments of the 5400 ATL are targeted for late 1988 under MVS support.

New Design And Engineering Center To Be Created

A new design and engineering center is to be established by the Company's large storage systems group. Staffed by engineering teams experienced in developing leading edge technology, this new group will be based in Boulder, Colorado.

"We will now be in a much stronger position to provide our customers with that extra technology edge when delivering solutions to meet their data storage needs," said Alfred T. Mockett, executive vice president for U.S. Sales and Service with Memorex Telex Corporation.

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ARCHITECTURAL FIRM
◆ CHOOSES 1001S ◆

WHITTMAN & Howard of Wellesley, Mass. was ready for a new telecommunications system. "Our system was 12 years old and starting to creak and crack and break down a lot," says Bob Snow, facilities manager.

The hundred-year-old engineering and architectural firm felt investing in a new system was important for servicing its New England clientele of municipalities and private corporations. Whittman & Howard's specialties include water and sewage treatment plants, highways, schools, and other environmental projects.

To help analyze its requirements, Whittman & Howard called in Nelson Communications, a local telecommunications consulting firm. Nelson developed an extensive request for proposal (RFP) and submitted it to several telecommunications vendors, including Memorex Telex.

"We reviewed about a dozen responses to Whittman & Howard's RFP," says Rick Pommet, executive vice president of Nelson Communications. "We narrowed it down to three and then helped in the final decision."

After qualifying as one of the three finalists, Memorex Telex began working directly with Whittman & Howard to more clearly explain the benefits of the Memorex Telex 1001S system and its features.

Dan Giatrelis, Memorex Telex senior systems consultant, was the team leader in the selling process. "A lot of people contributed to the sales effort," recalls Giatrelis. "Matthew Egan prepared the initial response to the RFP and conducted the formal system demonstration. Tina Jackson was the customer service representative, and Brad Littlehale, our regional manager, was involved as well."

"We proposed a Telex 1001S system with 512 ports, which will support up to 200 lines," Giatrelis explains. "It offers a lot of capabilities that are very attractive to Whittman & Howard."

Automated attendant, which handles after-hours calls and overflow calls to the main attendant, proved to be a favorite feature. The conference calling feature, supporting up to 12 parties, was also important, as was automatic route selection for long distance calls.

For Bob Snow, the Call Detail Reporting feature was one of the best. "It keeps me up to date on system usage and cost and gives us the ability to have detailed reports when we want them," he says. "Our old system had some reporting capability, but it never worked right, so we haven't used it in six or seven years."

System reliability was another major concern for Whittman & Howard. To help evaluate the system's performance and Memorex Telex service, a demonstration was arranged with a system user who happened to be in the same building. Snow recalls: "They were so vocal about their satisfaction with the Memorex Telex system and service that we felt very good about our decision."

"With the system's computerized diagnostics, many potential problems can be addressed before they occur," continues Snow. "And once a problem is diagnosed, Memorex Telex has several service locations in this area, so they can be extremely responsive when we need help."

Improved communications capabilities, better system reporting, and superior service convinced Whittman & Howard to choose the Memorex Telex system. Did anything else contribute to the decision?

Pommet of Nelson Communications points out that the system comes complete: switch, terminal, printer, and even a desk for the main system CRT console and keyboard. "Those are all extras for most vendors," he says.

For Whittman & Howard, another influencing factor was the professionalism of the Memorex Telex team. "I liked the way the people there presented themselves," says Bob Snow. "We have great confidence in their ability to service our needs for a long time." ◻

CENTER TO BE CREATED
CONTINUED

"We are totally committed to remaining a significant participant in the large storage system peripherals marketplace, and this step is a firm indication of that resolve," Mockett said.

Intention to Offer 3990-3 Alternative Disclosed

Memorex Telex announced also its intention to offer an IBM 3990 Model 3 compatible controller, which will integrate existing Memorex Telex controller features, such as non-volatile Semiconductor Storage Devices (SSD) and Cache, into a single stand-alone package, providing additional features and performance as compared with the IBM 3990-3 Storage Control Units (SCU). "Given the current status of the evolution of large storage controllers, Memorex Telex has taken the position to delay any formal announcement related to a Model 3 controller. When appropriate, we will announce our Model 3, which utilizes our existing expertise in the cache and solid state worlds, at the same time offering full functional compatibility to what IBM has previously announced," Mockett explained. ◻

US Newsbriefs

- **PERSPECTIVE MONTHLY,** June 1988 issue carried a three-page article bylined by Leslie Lord, a senior analyst for International Data Corp. Ms. Lord wrote very favorably about Memorex Telex saying that our Company "poses the most serious challenge to IBM's dominant position (in the 3270 workstation business)."

- **MIS WEEK,** June 27, 1988 issue reported on Memorex Telex's combined workstation offerings, featuring six desktop systems and a suite of software, connectivity and adapter products.

- **MIS WEEK,** July 11, 1988 issue noted a three-vendor horserace to develop the first high-speed tape drive backup unit for IBM Corp.'s new AS/400 computer line. They quoted unnamed sources saying that Memorex Telex and IPL Systems

Inc. are the leading contenders in the race, and both are said to be shooting for first-quarter 1989 product releases, while IBM is said to be aiming for a second- or third-quarter release.

- **GOVERNMENT COMPUTER NEWS,** July 8, 1988 noted that while the federal prison population is growing faster than the federal Bureau of Prisons staff, the agency keeps pace with the work load and saves money through Sentry, its on-line database management system. The article pointed out a recent $3.4 million contract award to Memorex Telex to replace all Sentry hardware. The system will bring in new 3274C2 controllers, using 3270 terminals. The new controllers also will allow IBM-compatible PCs to plug into the system, once emulation is in place. ◻

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