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PRESENTATION TO SECURITY ANALYSTS

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GOOD MORNING. IT'S A PLEASURE TO BE WITH YOU AGAIN. AS BEN HAS INDICATED, WE ARE HAVING A GOOD YEAR - A YEAR OF CONTINUED PROGRESS IN ALMOST EVERY ASPECT OF OUR BUSINESS. OUR BASIC THRUST IS CONTINUED IMPROVEMENT IN THE PROFITABILITY OF THE COMPUTER BUSINESS. TO ACHIEVE THAT OBJECTIVE WE CONTINUE TO WORK AT PROGRAMS TO IMPROVE THE OPERATING EFFICIENCY OF CONTROL DATA'S HUMAN, PHYSICAL AND FINANCIAL RESOURCES.

AT THE SAME TIME, WE ARE PURSUING AN AGGRESSIVE GROWTH STRATEGY IN LONG-TERM GROWTH BUSINESSES AND THIS CONTINUES TO REQUIRE REINVESTMENT OF MUCH OF THE BENEFIT PRODUCED FROM THESE OPERATING EFFICIENCIES. IN THE PAST TWO YEARS, NEVERTHELESS, WE HAVE DOUBLED COMPUTER BUSINESS PROFITABILITY IN TERMS OF RETURN ON REVENUE.

MY REMARKS THIS MORNING WILL COVER THESE TWO PERSPECTIVES - INVESTMENT STRATEGY AND PRODUCTIVITY IMPROVEMENT STRATEGIES. LET ME TURN FIRST TO INVESTMENT STRATEGY.

INVESTMENT STRATEGY

AS YOU KNOW, THE PRIMARY EMPHASIS IS ON SERVICES. THERE ARE SEVERAL REASONS FOR THIS. SLIDE 1

1. DATA SERVICES IS ONE OF THE FASTEST GROWING SEGMENTS OF THE COMPUTER INDUSTRY. THE AVERAGE ANNUAL GROWTH RATE OVER THE LAST 5 YEARS WAS ABOUT 19% AND FOR THE NEXT FIVE YEARS IS EXPECTED TO BE 16% TO 18%.
2. WE ARE CURRENTLY A LEADING SUPPLIER OF DATA SERVICES AND MARKET POSITION HAS A DIRECT CORRELATION WITH PROFITS. WE INTEND TO MAKE SUFFICIENT INVESTMENT TO RETAIN AND IMPROVE THIS POSITION.
3. DATA SERVICES IS ONE AREA OF THE COMPUTER INDUSTRY THAT IS NOT DOMINATED BY ANY ONE COMPANY. THE NATURE OF THE DATA SERVICES BUSINESS, WITH ITS EMPHASIS ON APPLICATIONS SOFTWARE AND EXPERTISE, ACTS AS AN EQUALIZER TO ALL WHO WOULD PARTICIPATE. IN SHORT, WE HAVE GOOD POSITION IN A BROAD RANGE OF APPLICATION AREAS.
4. DATA SERVICES BENEFITS DIRECTLY FROM THE INVESTMENTS IN OUR SYSTEMS AND PERIPHERAL BUSINESS SINCE, FOR EXAMPLE, WE USE CDC COMPUTERS IN CYBERNET AND OUR PLUG COMPATIBLE PERIPHERALS IN THE SERVICE BUREAU COMPANY. VICE VERSA, A

LEADING POSITION IN DATA SERVICES APPLICATIONS SUCH AS STRUCTURES, AND EDUCATION LEADS TO IMPROVED SYSTEMS MARKETABILITY.

5. DATA SERVICES REQUIRE ONLY 40¢ OF ASSETS PER REVENUE DOLLAR COMPARED TO \$1.20 FOR SYSTEMS AND 75¢ TO 80¢ FOR THE COMPUTER BUSINESS AS A WHOLE. SINCE CASH IS A SIGNIFICANT FACTOR IN OUR GROWTH, INCREASING THE EMPHASIS ON SERVICES IS ACTUALLY BENEFICIAL TO ALL AT A FASTER RATE THAN WOULD OTHERWISE BE THE CASE.

THESE STRATEGIC CHARACTERISTICS OF DATA SERVICES THAT I HAVE JUST GIVEN APPLY EQUALLY WELL TO OTHER SERVICES SUCH AS PROFESSIONAL SERVICES AND EDUCATION. ONLY THE SPECIFIC NUMBERS CHANGE. IN THE CASE OF EDUCATION THEY ARE EVEN MORE COMPELLING.

WHILE DATA SERVICES IS THE PRIMARY EMPHASIS, IT CERTAINLY IS NOT THE ONLY ONE. IN PERIPHERAL PRODUCTS WE HAVE ACHIEVED A LEADERSHIP POSITION IN THE DEVELOPMENT, MANUFACTURE, AND SALE OF PERIPHERALS FOR GENERAL PURPOSE COMPUTERS AND MINI COMPUTERS. WE ARE THE LARGEST MANUFACTURER OF OEM DISK PERIPHERALS IN THE WORLD AND THIS POSITION HAS ENABLED US TO GENERATE SIGNIFICANT PROFITS, PARTICULARLY IN THE OEM MARKET. SLIDE 2

PERIPHERAL PRODUCT LEADERSHIP IS LARGELY A FUNCTION OF TECHNOLOGY LEADERSHIP. SEVERAL YEARS AGO IT WAS APPARENT

THAT WE DID NOT HAVE SUFFICIENT R&D FUNDS TO ESTABLISH A LEADERSHIP POSITION ACROSS THE BOARD IN ALL PERIPHERAL PRODUCT AREAS, SO WE DELIBERATELY CONCENTRATED ON DISK MEMORIES, WHICH WAS AND STILL IS, THE LARGEST AND MOST RAPIDLY GROWING PART OF THE PERIPHERAL MARKET. THIS INVESTMENT STRATEGY HAS PAID OFF AS EVIDENCED BY THE SIGNIFICANT PROFITS CURRENTLY BEING GENERATED IN OEM. THE BASIC STRATEGY IN THE CURRENT PLAN IS TO MAINTAIN OUR LEADERSHIP POSITION IN DISKS BY HEAVY RE-INVESTMENT IN TECHNOLOGY AND TO EXTEND THIS LEADERSHIP POSITION INTO OTHER PRODUCT AREAS SUCH AS PRINTERS AND MASS STORAGE SYSTEMS.

IN SYSTEMS, OUR BASIC STRATEGY IS ONE OF MARKET SPECIALIZATION. SLIDE 3
UNLIKE OTHER COMPUTER COMPANIES, WHICH HAVE ATTEMPTED TO COMPETE ACROSS THE BOARD WITH IBM, WE HAVE CONCENTRATED ON SELECTED SEGMENTS OF THE MARKET REQUIRING LARGE SCALE SCIENTIFIC COMPUTERS. IN MORE RECENT YEARS WE HAVE FOCUSED OUR EFFORTS TO APPLY THESE LARGE SCALE MACHINES TO SIX PARTICULAR INDUSTRY/APPLICATIONS WHERE THE APPLICATION REQUIREMENTS ARE PARTICULARLY A GOOD MATCH FOR THE CAPABILITIES OF OUR HARDWARE AND SOFTWARE.

THERE ARE TWO OVERALL POINTS TO BE MADE BEFORE I LEAVE THE SLIDE 4
SUBJECT OF INVESTMENT STRATEGY:

1. IN EACH OF THESE AREAS - SERVICES, PERIPHERALS, SYSTEMS WE HAVE CERTAIN APPLICATIONS AND PRODUCTS WHERE WE ARE THE LEADER. IN SERVICES FOR EXAMPLE; GRAPHICS AND STRUCTURES

OR BANKING AND FINANCE, OR RADIO AUDIENCE MEASUREMENT OR SPORTS AND ENTERTAINMENT TICKETING. IN PERIPHERALS THERE IS THE DISK TECHNOLOGY, IN SYSTEMS, THE SELECTED SYSTEMS APPLICATION FIELDS I JUST MENTIONED. THIS IS THE BASIC STRENGTH OF THE BUSINESS ON WHICH EVERYTHING ELSE RESTS. MOVING OFF THESE POINTS OF STRENGTH THERE ARE ADDITIONAL OPPORTUNITIES FOR APPLICATION AREA AND PRODUCT LEADERSHIP. AND THIS IS THE ESSENCE OF THE PROFITABILITY GROWTH OPPORTUNITY OF THE FUTURE.

2. THE INVESTMENT CHARACTERISTICS OF THE THREE OPERATIONS ARE DIFFERENT. FOR EXAMPLE, IN SERVICES THE INVESTMENT REALLY IS IN TERMS OF CURRENT EXPENSE WHERE THE PRIMARY REQUIREMENT IS FOR MARKETING INVESTMENT. AS A PERCENT OF REVENUE, FOR EXAMPLE, THE 25%-30% REQUIRED IS NEARLY TWICE THAT OF SYSTEMS AND FIVE TIMES THAT OF OEM. SLIDE 5

SYSTEMS AND PERIPHERALS ARE CHARACTERIZED BY GREATER ASSET REQUIREMENTS ALTHOUGH IN DIFFERENT WAYS. PERIPHERALS HAS ASSET REQUIREMENTS WHICH ARE ASSOCIATED PRIMARILY WITH PLANT, INVENTORY AND RECEIVABLES. SYSTEMS, ON THE OTHER HAND, HAS ASSET REQUIREMENTS WHICH REFLECTS EQUIPMENT LEASING.

RETURNING TO EXPENSES THERE IS THE MATTER OF TECHNICAL EXPENSE. SYSTEMS IS THE MOST DEMANDING BECAUSE OF SOFTWARE; PERIPHERALS

IS NEXT IN REQUIREMENTS FOR TECHNICAL EXPENSE AND SERVICES LAST - PRIMARILY BECAUSE APPLICATIONS SOFTWARE CAN BE PROCURED RATHER THAN DEVELOPED AND PAID FOR IN THE FORM OF LICENSE FEES, RATHER THAN FRONT-END DEVELOPMENT EXPENSE.

PRODUCTIVITY STRATEGIES

PHYSICAL RESOURCES

LET ME NOW TURN TO THE STRATEGIES - FOR PRODUCTIVITY IMPROVEMENT. THERE ARE SO MANY PROGRAMS IN THIS REGARD THAT IT IS NOT PRACTICAL TO TRY TO ENUMERATE ALL OF THEM, BUT I WILL MENTION THE MOST IMPORTANT BROAD CATEGORIES. FIRST ASSET PRODUCTIVITY. WE PLACED SPECIAL EMPHASIS ON ASSET MANAGEMENT DURING THE PERIOD 1975 THROUGH 1977. THIS ENABLED US TO REDUCE THE ASSET REQUIREMENTS PER DOLLAR OF REVENUE FROM 1.17 AT YEAR-END 1974 TO 0.83 BY YEAR-END 1977. WE ARE CONTINUING TO WORK ON ASSET EFFICIENCY IMPROVEMENTS PARTICULARLY ON RECEIVABLES, INVENTORY AND PROPERTY PLANT AND EQUIPMENT. I SHOULD ALSO MENTION THAT WHEREAS WE WORK VERY HARD TO REDUCE SUCH ASSETS, WE HAVE WORKED EQUALLY HARD TO INCREASE THE REVENUE FROM OUR LEASE BUSINESS AND THIS MEANS THAT SOME OF ASSET EFFICIENCY SAVINGS ARE REINVESTED IN LEASED EQUIPMENT.

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HUMAN RESOURCES

IN THE AREA OF PRODUCTIVITY OF HUMAN RESOURCES THERE IS A PROGRAM WE CALL "WORK EVALUATION". THIS CONSISTS OF IDENTIFYING

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PEOPLE WHO ARE DIRECTLY INVOLVED IN DELIVERING OUR VARIOUS PRODUCTS, SUCH AS DIRECT MANUFACTURING LABOR, SALES REPRESENTATIVES, CUSTOMER ENGINEERS, ETC., ON THE ONE HAND, AND ON THE OTHER, THOSE WHO ARE IN VARIOUS SUPPORT ROLES. THE THRUST OF THE PROGRAM IS TO INCREASE THE NUMBER OF DIRECT EMPLOYEES RELATIVE TO THE NUMBER OF SUPPORT PEOPLE. THERE ARE SPECIAL WORK EVALUATION PROGRAMS DIRECTED AT REDUCING G&A EXPENSE PARTICULARLY AT THE U.S. HEADQUARTERS AND IN MOST OF OUR INTERNATIONAL COUNTRY ORGANIZATIONS.

EACH COUNTRY, SINCE IT IS A LEGAL AND ORGANIZATIONAL ENTITY, HAS CERTAIN FIXED OVERHEAD OR SUPPORT EXPENSES. AND THE VOLUME OF BUSINESS TO SUPPORT THOSE EXPENSES IS RELATIVELY SMALL -- COMPARED, SAY, TO THE UNITED STATES. MOREOVER, ACROSS INTERNATIONAL SUBSIDIARIES THE RATIO OF SUPPORT TO DIRECT EXPENSES VARIED BY AS MUCH AS 2.4 TO 1. OUR ANALYSIS NOT ONLY TURNED UP SOME OF THE REASONS FOR THIS VARIATION, BUT BY "TOTEMING" THE SUBSIDIARIES PROVIDED POWERFUL MOTIVATION TO THEM FOR SELF-IMPROVEMENT. THE BENEFITS FROM THESE PROGRAMS ARE EVIDENT IN THE STEADY INCREASE IN REVENUE/EMPLOYEE.

FINANCIAL RESOURCES

WE HAVE SEVERAL STRATEGIES FOR IMPROVING THE EFFECTIVENESS OF OUR FINANCIAL RESOURCES, BOTH IN THE FINANCING OF THE BUSINESS AND REDUCING OUR HIGH TAX RATE.

MARV ROGERS WILL DISCUSS BOTH OF THESE AREAS IN MORE DETAIL.

ECONOMIC ASSUMPTIONS

OUR FINANCIAL RESULTS ARE, OF COURSE, INFLUENCED BY ECONOMIC SLIDE 8
CONDITIONS, PARTICULARLY IN THE U.S. AND WESTERN EUROPE.
WHILE THERE HAVE BEEN A FEW STUDIES THERE IS NOT A LARGE
BASE OF DATA ON SPECIFIC CORRELATIONS BETWEEN ECONOMIC FACTORS
AND COMPUTER INDUSTRY REVENUES. HOWEVER, WE HAVE DEFINED
SOME RELATIONSHIPS. FOR EXAMPLE, OUR OEM SALES ARE SENSITIVE
TO CHANGES IN CERTAIN SEGMENTS OF GNP. THE OEM PLAN FOR 1979
IS BASED ON SLOW GROWTH IN THESE SEGMENTS SPECIFICALLY A 2%
INCREASE IN THE DOMINANT SECTOR OF PRODUCERS DURABLE EQUIPMENT
AND 12% IN THE SECONDARY SECTOR OF EXPORT OF CAPITAL GOODS.
SUCH RELATIONSHIPS BETWEEN ECONOMIC CONDITIONS AND OUR BUSINESS
ASSIST US IN ANTICIPATING PROBLEMS AND THEN TAKING APPROPRIATE
PRECAUTIONARY ACTION.

THERE ARE OTHER REASONS WE ARE IN A BETTER POSITION TO RESIST SLIDE 9
AN ECONOMIC DOWNTURN:

1. WE NOW HAVE A MUCH BETTER BALANCE IN THE COMPUTER BUSINESS
THAN WE DID 5 YEARS AGO. ALL OF THE MAJOR AREAS OF THE
BUSINESS - DATA SERVICES, EDP SYSTEMS AND PERIPHERAL
PRODUCTS - ARE SOLIDLY IN THE BLACK. OVERALL, THIS
DIVERSITY PROVIDES SOME PROTECTION AGAINST RAPID CHANGES
IN THE ECONOMIC ENVIRONMENT.

2. OUR COMPUTER SYSTEMS CUSTOMER BASE IS BROADER TODAY THAN IT WAS SEVERAL YEARS AGO.
3. WE HAVE INVESTED SUBSTANTIALLY IN BUILDING OUR LEASE BASE IN BOTH COMPUTER SYSTEMS AND END USER PERIPHERAL PRODUCTS. THE RENTAL INCOME IS INHERENTLY MORE STABLE THAN OUTRIGHT SALES AND SHOULD PROVIDE AN ADDITIONAL HEDGE AGAINST ECONOMIC FLUCTUATIONS.

ALL OF THESE FACTORS CAUSE US TO HAVE GREATER CONFIDENCE IN OUR ABILITY TO HANDLE A RECESSION IN 1979 OR 1980 MORE EFFECTIVELY THAN WE DID IN 1970 AND 1975.

STRATEGY QUANTIFICATION

SOME QUANTIFICATION OF OUR INVESTMENT STRATEGY IN TERMS OF WHERE THE MONEY COMES FROM AND WHERE IT GOES MAY PROVIDE SOME PERSPECTIVE. IN 1978 ABOUT \$162 MILLION OF CURRENT PERIOD EXPENSE IS BEING REINVESTED IN THE BUSINESS. \$107M OF THIS IS FOR OUR R & D. THE TOP PORTION OF THE BAR ON THE CHART REFLECTS CUSTOMER FUNDED DEVELOPMENT, MANAGEMENT INFORMATION SYSTEMS AND EMPLOYEE TRAINING. THESE EXPENDITURES HAVE LITTLE OR NO BENEFIT AS FAR AS CURRENT YEAR RESULTS ARE CONCERNED. ALSO, THIS DOES NOT INCLUDE CONTINUATION ENGINEERING, SOFTWARE MAINTENANCE AND SIMILAR ACTIVITIES REQUIRED TO SUPPORT CURRENT BUSINESS. THIS TOTAL WILL INCREASE ABOUT 9% IN 1979. THE

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LARGEST SEGMENT IS R & D FOR NEW PRODUCTS TO SUPPORT THE PERIPHERALS AND SYSTEMS TECHNOLOGY PROGRAMS WHICH I DISCUSSED EARLIER.

IN THE CASE OF DEVELOPING ENTIRELY NEW SERVICES, THE AMOUNTS INCLUDED ON THE CHART ARE REALLY ONLY PART OF THE REQUIRED INVESTMENT. YOU REALLY HAVE TO COUNT ALMOST EVERY DOLLAR SPENT AS BEING "DEVELOPMENTAL" AS OPPOSED TO SOME BEING THE COST OF DELIVERING CURRENT BUSINESS. SAID ANOTHER WAY: FOR THESE SERVICES ONE HAS A LARGE "POT" OF DEVELOPMENTAL EXPENSE (MEDICAL, AGRICULTURAL, DATA SERVICES) OFFSET BY SOME REVENUE.

THE SECOND CATEGORY OF INVESTMENT, IS THAT OF PHYSICAL ASSETS. SLIDE 11
IN 1978 ABOUT \$105 MILLION OF ADDITIONAL ASSETS WILL BE REQUIRED. THE IMPACT OF OUR PROGRAMS TO IMPROVE ASSET EFFICIENCY HAS REDUCED OUR OVERALL ASSET REQUIREMENTS BY ABOUT \$159 MILLION. IN OTHER WORDS, IF OUR ASSET TO REVENUE TO RATIO HAD NOT IMPROVED IN 1978, WE WOULD HAVE NEEDED \$264 MILLION ADDITIONAL ASSETS AND A SUBSTANTIAL INCREASE IN DEBT TO SUPPORT THE FORECAST REVENUE FOR THIS YEAR. SO HERE YOU HAVE A GRAPHIC DEMONSTRATION OF THE COMBINED STRATEGIES OF PRODUCTIVITY IMPROVEMENT AND GROWTH INVESTMENT.

LOOKING AHEAD TO 1979 WE PLAN TO FUND NEARLY HALF OF THE NEW ASSET GROWTH BY MORE EFFICIENT USE OF OUR EXISTING ASSETS.

PRODUCTIVITY IMPROVEMENT

NEXT LET ME ILLUSTRATE SOME OF OUR PROGRESS IN PRODUCTIVITY IMPROVEMENT. AS I MENTIONED, THROUGH A VARIETY OF PROGRAMS WE EXPECT TO IMPROVE PRODUCTIVITY IN HUMAN RESOURCES AS MEASURED BY REVENUE PER EMPLOYEE AS WELL AS IN CAPITAL RESOURCES MEASURED IN ASSETS PER REVENUE DOLLAR.

EXAMPLES IN PRODUCTIVITY IMPROVEMENTS ARE REFLECTED ON THE SLIDE 12 SCREEN.

IN THE LARGE SYSTEMS AREA, CHECK-OUT TIME HAS BEEN REDUCED BY 50% AS A RESULT OF IMPROVED RELIABILITY AND INCREASED USE OF STANDARD INDUSTRY CIRCUITS. ALSO, WE HAVE BEEN ABLE TO REDUCE BY TWO-THIRDS, OUR SHIPPED AND NOT ACCEPTED INVENTORY OVER THE LAST TWO YEARS THROUGH IMPROVED HARDWARE AND FIELD INSTALLATION TECHNIQUES. OBVIOUSLY THESE IMPROVEMENTS HAVE FAVORABLE IMPACT ON LABOR COSTS AND THE COST OF CARRYING THESE ASSETS.

ADDITIONAL IMPROVEMENTS HAVE ALSO BEEN MADE IN OUR PRODUCTION FACILITIES. MORE IMPORTANTLY, IMPROVED MANUFACTURING TECHNIQUES HAVE REDUCED CIRCUIT BOARD LABOR COSTS BY 50% OVER THE PAST 30 MONTHS.

IN THE AREA OF DATA SERVICES, OVER THE PAST TWO YEARS SBC'S CALL/370 COMMUNICATION COSTS TO US HAVE INCREASED ABOUT 8% PER YEAR. IN SPITE OF THESE INCREASES, WE HAVE REDUCED COSTS AS A PERCENT OF REVENUE ABOUT 20%.

CONCLUSION

JUST TO RECAPITULATE, THEN, OUR PROFITABILITY IS IMPROVING AND WE EXPECT IT TO CONTINUE TO IMPROVE. AT THE SAME TIME, WE RECOGNIZE THAT WE ARE SOMEWHAT BEHIND OTHER COMPANIES IN THE INDUSTRY IN TERMS OF RETURN ON INVESTMENT.

LOOKING BACK OVER THE PAST FIVE YEARS WE CAN SEE STEADY IMPROVEMENTS IN THE FUNDAMENTAL DETERMINANTS OF OUR BUSINESS. OUR PRODUCT LINE IS STRONGER, OUR POSITIONS IN SELECTED PARTS OF THE COMPUTER MARKET IS WELL RECOGNIZED, OUR MANAGEMENT SYSTEMS HAVE BEEN IMPROVED.

THIS IS THE FOURTH YEAR OF IMPROVING PROFITABILITY, AND YET WE STILL CAN SEE OPERATING IMPROVEMENT EFFICIENCIES TO BE MADE. THERE SIMPLY IS NO DOUBT IN MY MIND THAT WE CAN AND WILL CONTINUE TO IMPROVE PROFITABILITY AND WE ARE DETERMINED TO DO THAT WHILE AT THE SAME TIME MANAGING A PROGRAM OF INVESTING FOR THE FUTURE.

OUR BUSINESS IS STRONG AND THE OUTLOOK FOR 1979 CONTINUES TO BE BRIGHT. WHILE THE ECONOMIC UNCERTAINTY CANNOT BE DISCOUNTED, WE ARE MUCH BETTER PREPARED THAN IN THE PAST.

THANK YOU, I WILL BE GLAD TO TAKE YOUR QUESTIONS.