

(DRAFT-04/30/79)

CONTROL DATA CORPORATION
ANNUAL - STOCKHOLDERS - MEETING

May 2, 1979

R. M. Price

GOOD MORNING LADIES AND GENTLEMEN.

MR. NORRIS AND MR. MILLER HAVE ALREADY COMMENTED ON THE COMPANY'S PROGRESS IN 1978. AND FOR THE COMPUTER BUSINESS, 1978 WAS ALSO A YEAR OF GOOD PROGRESS. THE ACHIEVEMENTS OF OUR PEOPLE IN ALL PARTS OF THE COMPUTER BUSINESS ARE NOTEWORTHY TO SAY THE LEAST AND IT IS TEMPTING TO SPEND ALL OF THE ALLOTTED TIME ON THAT SUBJECT.

BUT THE ANNUAL REPORT AND THE ANNOUNCEMENT OF FIRST QUARTER RESULTS HAVE ALREADY REPORTED THAT SUCCESS. MORE IMPORTANT ARE THE IMPLICATIONS THAT COMPUTER-BASED EDUCATION HAVE FOR THE FUTURE OF OUR PRODUCTS AND SERVICES, SO LET ME PROCEED WITH THAT PART OF TODAY'S PROGRESS REPORT ON CBE.

THE COMPUTER SYSTEMS BUSINESS IS ALREADY BENEFITING FROM THE AVAILABILITY OF PLATO. TO MEET THEIR COMPUTER-BASED EDUCATION REQUIREMENTS, LARGE ORGANIZATIONS NEED ENTIRE PLATO SYSTEMS. THESE

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SYSTEMS USE THE SAME LARGE-SCALE CYBER COMPUTERS THAT WE SELL FOR OTHER APPLICATIONS. SO, IT IS POSSIBLE FOR THESE LARGE CUSTOMERS TO BEGIN USE OF PLATO ON A SMALL SCALE AND GROW AS NECESSARY TO MEET THEIR COMPLETE TRAINING NEEDS. OR LOOKED AT THE OTHER WAY AROUND, PLATO GREATLY INCREASES THE ATTRACTIVENESS OF CYBER COMPUTERS BECAUSE OF THIS NEW AND BROADER APPLICABILITY.

THRU THE PLATO NETWORK WE ALSO MAKE IT POSSIBLE FOR USERS TO START WITH SUBSCRIPTIONS FOR A FEW PLATO TERMINALS AND GROW AS THEIR REQUIREMENTS EXPAND TO BECOME FULL PLATO SYSTEMS USERS. TODAY, FOR EXAMPLE, OVER 60 COLLEGES AND UNIVERSITIES ARE USING PLATO ON THIS BASIS AND MANY OF THEM WHO TODAY HAVE ONLY A FEW TERMINALS WILL ULTIMATELY BECOME SYSTEMS CUSTOMERS.

THERE ARE CURRENTLY NINE CYBER COMPUTERS DEDICATED TO DELIVERING CBE. THE INSTALLATION OF THE TENTH IN JOHANNESBURG, SOUTH AFRICA, WILL SOON BE COMPLETED. THIS IS THE SYSTEM REFERRED TO IN THE PROXY STATEMENT TO BE USED FOR EDUCATION AND VOCATIONAL TRAINING FOR SOUTH AFRICA BLACKS.

DATA SERVICES ARE ALSO USING PLATO TO ENHANCE AND DIFFERENTIATE THEIR SERVICES. PLATO CAN HELP THE CUSTOMER LEARN HOW TO USE APPLICATIONS SOFTWARE. AND IT CAN PROVIDE A COMMUNICATIONS LINK WITH EXPERT ANALYSTS WHEN ADDITIONAL HELP IS NEEDED. THE ANALYST CAN CALL UP ON A TERMINAL THE SAME INFORMATION THE CUSTOMER IS

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LOOKING AT ON HIS TERMINAL, INTERACT WITH THE CUSTOMER'S DISPLAY, AND PROVIDE ON-LINE ASSISTANCE AS NEEDED. THIS PROVIDES BETTER SERVICES FOR THE CUSTOMER AND MORE EFFICIENT USE OF OUR PROFESSIONAL STAFF.

USING ANY OR ALL OF THESE DELIVERY METHODS, COMPUTER-BASED EDUCATION CAN BE A POWERFUL ASSIST IN HELPING COMPANIES -- ESPECIALLY SMALL COMPANIES -- STAY HEALTHY. THE BOOM IN MINICOMPUTERS, FOR EXAMPLE, HAS SPAWNED A TREMENDOUS NUMBER OF SMALL COMPANIES WHO BUY OUR PERIPHERAL PRODUCTS. IN THE PAST FOUR YEARS, WE HAVE ADDED NEARLY 500 SUCH SMALL COMPANIES TO OUR OEM CUSTOMER LIST. AND OUR PRODUCTION OF DISK MEMORY PRODUCTS IS DOUBLING JUST THIS YEAR. MOST OF THESE SMALL COMPANIES CAN MAKE GOOD USE OF OUR PLATO SERVICES. BY THIS TIME NEXT YEAR, THE SMALL OEM CUSTOMER OF CONTROL DATA WILL HAVE AVAILABLE THROUGH THE LEARNING CENTER NETWORK COMPUTER-BASED MATERIAL FOR TECHNICAL TRAINING OF FIELD SERVICE ENGINEERS AS WELL AS THE CURRENTLY AVAILABLE FINANCIAL MANAGEMENT AND SALES COURSES.

MR. NORRIS MENTIONED THE WIDENING RECOGNITION PLATO IS GETTING AS AN EFFICIENT METHOD FOR EDUCATION AND TRAINING. ONE REASON FOR THIS IS THE INCREASING REALIZATION THAT TRAINING FOR THOSE WHO OPERATE COMPLEX EQUIPMENT SUCH AS NUCLEAR POWER PLANTS, AIRCRAFT, AND ELECTRIC UTILITIES IS CRITICAL TO ASSURING PUBLIC SAFETY. THE COSTS OF MISTAKES ARE CLEARLY IMMENSE. TRAINING, USING PLATO, IS PROVIDING OPERATORS WITH PRACTICE IN DEALING WITH UNUSUAL AND

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DANGEROUS CONDITIONS THAT COULD NEVER BE POSSIBLE IN REAL-LIFE, EITHER BECAUSE OF COST OR BECAUSE OF THE HIGH RISK OF CATASTROPHE. FURTHER, PLATO ASSURES THE COMPETENCY OF EACH INDIVIDUAL OPERATOR ONCE THE COURSE IS COMPLETED.

THE RECENT EVENTS AT THREE-MILE ISLAND ARE A GOOD EXAMPLE OF THE NEED FOR TRAINING WHICH ESTABLISHES COMPETENCY IN DEALING WITH ABNORMAL EVENTS. AS THE INVESTIGATION INDICATED, ADDITIONAL TRAINING OF OPERATORS WILL BE REQUIRED. THROUGH THE USE OF PLATO, IT IS POSSIBLE TO SIMULATE NUCLEAR PLANT OPERATIONS, INCLUDING CONTINGENCY CONDITIONS, PROVIDING OPERATORS WITH THE DESIRED LEVEL OF TRAINING.

ANOTHER EXAMPLE IS THE DEVELOPMENT OF COURSEWARE IN COLLABORATION WITH THE NATIONAL ASSOCIATION OF STATE DIRECTORS OF LAW ENFORCEMENT TRAINING. POTENTIALLY, THIS WILL GIVE MANY THOUSANDS OF LAW ENFORCEMENT AGENCIES IN THE U.S THE OPPORTUNITY TO BENEFIT FROM PLATO-BASED TRAINING.

MANY COMPANIES FACE AN INCREASINGLY DIFFICULT TASK IN MEETING TRAINING NEEDS FOR THEIR HIGHLY DISPERSED PEOPLE. CONTROL DATA'S LEARNING CENTER NETWORK WILL MEET THIS NEED. TAKE FOR EXAMPLE, THE CLEVELAND TWIST DRILL COMPANY. IT HAS THE DIFFICULT AND EXPENSIVE TASK OF KEEPING 600 WIDESPREAD DISTRIBUTORS WELL TRAINED IN THE FEATURES OF ITS MANY PRODUCTS. AT BEST, THEY CAN BRING ONLY 150 OR

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SO TO CLEVELAND FOR A WEEK EACH YEAR. BUT USING CONTROL DATA LEARNING CENTERS ACROSS THE COUNTRY TRAINING CAN BE BROUGHT DIRECTLY TO THE DISTRIBUTORS. BOTH THE FREQUENCY AND THE BREADTH OF THE TRAINING HAS BEEN INCREASED. THE PLATO TERMINAL SCREEN PRESENTS CLEVELAND'S PRODUCTS IN THE FORM OF TEXT, DRAWINGS AND ANIMATED GRAPHICS. THE DISTRIBUTORS INTERACT BY KEYBOARD AND TOUCH SCREEN, ANSWERING QUESTIONS AND SIMULATING PRODUCT OPERATION, MAINTENANCE AND CUSTOMER SERVICE.

WHILE WE ARE TALKING ABOUT THE BENEFITS OF COMPUTER-BASED EDUCATION TO THE WORLD, WE ARE PROVING IT INTERNALLY BY IMPROVING OUR OWN PRODUCTIVITY.

THE PLATO SYSTEM IS USED IN CONTROL DATA TRAINING PROGRAMS FOR MANAGEMENT, TECHNICAL AND SALES PEOPLE. AND THIS YEAR THE COMPUTER BUSINESS IS BUDGETED TO PROVIDE NEARLY 200,000 HOURS OF CBE SERVICE AS A PART OF THESE INTERNAL PROGRAMS. THE INSTRUCTION IS DESIGNED FOR NEW HIRES AS WELL AS FOR EMPLOYEES WITH CONTINUING NEEDS TO KEEP UP WITH NEW PRODUCTS, TECHNOLOGIES AND MANAGEMENT TECHNIQUES.

IMPROVING OPERATIONAL EFFICIENCY IN CONTROL DATA HAS BEEN A MAJOR GOAL. AND, IN RECENT YEARS, PLATO-BASED TRAINING HAS BEEN ONE OF THE MOST IMPORTANT METHODS OF ACCOMPLISHING THIS. THIS EMPHASIS ON EMPLOYEE TRAINING AND THE SUBSTANTIAL IMPROVEMENT IN OUR FINANCIAL PERFORMANCE THAT WE ARE ABLE TO REPORT TO YOU IN RECENT YEARS IS NO CHANCE COINCIDENCE.

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THE EVOLUTION OF COMPUTER-BASED EDUCATION IS FOLLOWING A PATTERN VERY SIMILAR TO THAT OF THE COMPUTER ITSELF. EARLY COMPUTER CUSTOMERS HAD TO DEVELOP THEIR OWN SOFTWARE -- THERE WERE NO STANDARD APPLICATION PACKAGES. AS THE INDUSTRY GREW AND MATURED, STANDARD APPLICATIONS SOFTWARE HAS BECOME AVAILABLE AND GREATLY INCREASED THE NUMBER OF PEOPLE WHO COULD AFFORD AND USE COMPUTERS EFFECTIVELY. SIMILARLY, OUR FIRST CBE BUSINESS HAS BEEN WITH THOSE WHOSE NEEDS JUSTIFIED THE DEVELOPMENT OF CUSTOM COURSEWARE. AND NOW WE ARE JUST STARTING TO HAVE STANDARD, OFF-THE-SHELF COURSEWARE AVAILABLE FOR OUR CUSTOMERS. CERTAINLY IT IS ONLY A TINY FRAGMENT OF WHAT IT WILL BE IN THE FUTURE. NEVERTHELESS, MASS MARKETS ARE BEGINNING TO OPEN TO US. BASIC SKILLS COURSEWARE -- WHICH IS JUST WHAT THE NAME IMPLIES - READING, WRITING, ARITHMETIC -- IS ONE EXAMPLE OF THIS. BASIC SKILLS IS THE CENTRAL INGREDIENT OF THE FAIR BREAK PROGRAM. THE COURSES ARE ALSO AVAILABLE THROUGH THE LEARNING CENTER NETWORK AND RECENTLY WE ANNOUNCED A SPECIAL PLATO PACKAGE OF EIGHT TERMINALS AND COURSEWARE FOR SECONDARY SCHOOLS. IN A QUITE DIFFERENT AREA, THE STANDARD MANAGEMENT TRAINING COURSES WE HAVE DEVELOPED HAVE BROAD APPEAL. THE SAME IS TRUE OF COURSES FOR SALESMEN AND, NATURALLY, THERE IS A GREAT VARIETY OF COURSEWARE IN COMPUTER SCIENCES. MANY OF THE INTERNAL COURSES I REFERRED TO A MOMENT AGO HAVE BEEN MADE STANDARD COMMERCIAL OFFERINGS. ALONG WITH THIS GROWING ARRAY OF STANDARD COURSEWARE IS REDUCED COST. TECHNOLOGICAL IMPROVEMENTS IN THE PLATO SYSTEM TOGETHER WITH HIGHER

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VOLUMES HAVE PERMITTED THREE PRICE REDUCTIONS IN THREE YEARS. AND THE DECLINING COST OF COMPUTER HARDWARE, BETTER COMMUNICATIONS METHODS, AND MORE EFFICIENT METHODS FOR PREPARING COURSEWARE WILL CONTINUE THIS TREND. LOWER COSTS MAKE IT INCREASINGLY ECONOMICAL FOR MORE AND MORE TRAINING NEEDS TO BE MET BY USING COMPUTER-BASED EDUCATION.

IN SHORT, COMPUTER-BASED EDUCATION IS NO LONGER AN EXPERIMENT, NOR EVEN A DAZZLING NEW TECHNOLOGY. IT IS A FULLY SUPPORTED SERVICE OFFERING OF YOUR COMPANY AND IT IS EFFECTIVE, BOTH EDUCATIONALLY AND FINANCIALLY.

WITHIN THE LAST THREE YEARS, USE OF PLATO SERVICES IN THE UNITED STATES ALONE HAS GROWN FROM 10,000 HOURS A MONTH TO MORE THAN 125,000. BY THE END OF THIS YEAR, WE WILL HAVE 80 LEARNING CENTERS IN OPERATION THROUGHOUT THE COUNTRY EQUIPPED WITH ALL THE RESOURCES REQUIRED TO DELIVER EFFECTIVE, INSTRUCTOR INDEPENDENT, COMPUTER-BASED EDUCATION.

WHILE IN TERMS OF REVENUE IT IS STILL A SMALL PART OF THE TOTAL BUSINESS AND SHOULD NOT OVERSHADOW THE IMPORTANCE OF OTHER PROGRESS THAT HAS BEEN MADE THROUGHOUT THE COMPANY, PLATO IS ONE OF THE MOST EXCITING NEW DEVELOPMENTS OUR COMPANY HAS EVER KNOWN. IT IS HERE TODAY AND IS GROWING IN SIGNIFICANCE EVERY DAY.