MARV HAS SUMMARIZED FOR YOU THE NUMBERS WITH REGARD TO 1982 AND 1983. WHAT I WANT TO DO NOW IS TO GIVE YOU AT LEAST SOME INSIGHT INTO THE ACCOMPLISHMENTS AND PLANS WHICH LIE BEHIND THESE NUMBERS. THE RELATIVELY GOOD PERFORMANCE IN 1982 -- IN THE FACE OF COMPUTER BUSINESS REVENUES SOME $335M LESS THAN PLAN, IN THE FACE OF CASUALTY INSURANCE LOSSES AND RESERVES WHICH WERE $10.5M BELOW PLAN IN COMMERCIAL CREDIT'S EARNINGS, AND IN THE FACE OF AN ECONOMY WHICH NEGATIVELY AFFECTED ALMOST ALL OUR BUSINESSES IN SOME WAY -- THAT PERFORMANCE AND THE PROJECTED IMPROVEMENT IN 1983 CAN ONLY BE ATTRIBUTED TO A CONCENTRATED EFFORT TO JUST PLAIN DO BETTER THAN CIRCUMSTANCES WOULD OTHERWISE HAVE IT. SAID ANOTHER WAY, IT IS A MATTER OF IMPROVED EFFECTIVENESS IN DAY-TO-DAY OPERATIONS.
OPERATIONAL EFFECTIVITY OR PRODUCTIVITY, AS WE HAVE DISCUSSED BEFORE, HAS TO BE LOOKED AT IN ITS THREE BASIC COMPONENTS: PEOPLE, PROCESS, AND CAPITAL. I'LL TAKE PEOPLE FIRST.

THE BASIC STRATEGY WITH REGARD TO THE PRODUCTIVITY AND EFFECTIVENESS OF CONTROL DATA PEOPLE IS EMBODIED IN A SET OF CONCEPTS SET DOWN TWO YEARS AGO CALLED FAIR EXCHANGE. FROM TIME TO TIME OVER THE PAST TWO YEARS, WE HAVE SHARED WITH YOU DIFFERENT ASPECTS OF FAIR EXCHANGE. THE BASIC PREMISE IS THAT IF PEOPLE PERCEIVE AN ENVIRONMENT OF RELATIVE JOB SECURITY, A SENSE OF JUSTICE AND FAIRNESS, A FEELING THAT WHAT THEY THINK AND DO MATTERS, AND IF THEY HAVE AN OPPORTUNITY TO ACQUIRE NECESSARY SKILLS, THEY WILL MAKE THE COMMITMENT TO BECOME MORE PRODUCTIVE. ALL THIS IS EMBODIED THEN IN THE FIVE BASIC PRINCIPLES OF FAIR EXCHANGE.

(TRANSPARENCY #1 - FAIR EXCHANGE PRINCIPLES)

NOW, WHETHER AN EMPLOYEE SENSES THESE PRINCIPLES -- THAT IS, WHETHER THEY IN FACT DEFINE THE CULTURE IN WHICH WE OPERATE -- DEPENDS NOT ON WHAT WE SAY -- NOT ON CORPORATE PRONOUNCEMENTS -- NOT ON SLICK BROCHURES OR EMPLOYEE COMMUNICATIONS -- RATHER IT DEPENDS FIRST AND FOREMOST ON WHAT IS EXPERIENCED DAY IN AND DAY OUT AT THEIR LOCAL WORK SITE. THERE IS AN UNUSUAL DOWNSIDE RISK IN EVERYTHING WE DO AND SAY.
TO EMPLOYEES, AND THAT IS THE AMOUNT OF CONTRAST THEY MAY OBSERVE BETWEEN WHAT ANY ONE OF US IN TOP MANAGEMENT MIGHT SAY AND WHAT THEY ACTUALLY EXPERIENCE ON THE JOB. NOTHING IS WORSE THAN THE APPARENT HYPOCRISY THAT WORKS AGAINST US WHEN LOCAL ACTION SPEAKS OPPOSITE OUR WORDS.

SO, THE KEY IS MANAGEMENT DEVELOPMENT AT ALL LEVELS. FROM THE MOMENT INDIVIDUALS PREPARE TO BECOME MANAGEMENT THEY MUST NOT ONLY BE TRAINED FOR MANAGEMENT, BUT INDOCTRINATED IN THE MOST POSITIVE SENSE IN THESE PRINCIPLES. MOST IMPORTANT, THEY NEED TO LEARN WHAT THOSE PRINCIPLES MEAN IN TERMS OF THEIR ACTUAL RESPONSES TO CONDITIONS AND EVENTS IN THE AREAS THEY SUPERVISE.

BUILDING ON EXISTING MANAGEMENT DEVELOPMENT PROGRAMS, WE HAVE MADE A GREAT DEAL OF PROGRESS AT THIS. I'LL COME BACK TO THAT POINT. BUT EDUCATION IS NOT ENOUGH. THE WHOLE CONCEPT HAS TO BE CONSCIOUSLY INTRODUCED INTO EVERYDAY WORK LIFE.

IN 1982, WE DEVELOPED AN INTERVENTION PROCESS TO HELP THE TOP MANAGEMENT OF OUR BUSINESSES UNDERSTAND THE FAIR EXCHANGE PRINCIPLES AND ESPECIALLY HOW TO APPLY THEM IN THEIR OWN BUSINESS. THE PROCESS INTEGRATES SEVERAL OBJECTIVES:

**(TRANSPARENCY #2)**

THE PROCESS INTEGRATES SEVERAL OBJECTIVES:
THIS TEAM PROCESS IS THEN CARRIED DOWN TO THE NEXT LEVEL OF MANAGEMENT AND A PROCESS OF FEEDBACK BEGINS BECAUSE IT QUICKLY BECOMES APPARENT THAT NOT ALL AGREE ON CURRENT CONDITIONS, AND THE TEAMS GET AN OPPORTUNITY TO RESOLVE THE DIFFERENCES IN THEIR PERCEPTIONS. MOST IMPORTANT THAT MANAGEMENT TEAM HAS A PLAN FOR IMPLEMENTING FAIR EXCHANGE IN THEIR BUSINESS.

ENGINEERING SERVICES WAS WELL ALONG IN IMPLEMENTING MANY BASIC ELEMENTS IN IMPROVED OPERATIONAL EFFECTIVITY, SO IT WAS CHOSEN AS THE FIRST ORGANIZATION TO USE THE FULL FAIR EXCHANGE INTERVENTION PROCESS.

THE RESULTS ENGINEERING SERVICES HAS ACHIEVED DURING THE LAST YEAR ARE TRULY IMPRESSIVE: ONE WHOLE LAYER OF MANAGEMENT WAS REMOVED, ASSETS EMPLOYED PER DOLLAR OF REVENUE REDUCED FROM 55 CENTS TO 54 CENTS. THE PRE-TAX RETURN ON REVENUE IMPROVED 2.2 PERCENT IN 1982 AND NEXT YEAR WILL IMPROVE ANOTHER 1.4 PERCENT TO 13.5 PERCENT. THUS, IN TWO YEARS, ENGINEERING SERVICES PRE-TAX MARGINS HAVE IMPROVED BY OVER ONE-THIRD. AND ALL THAT IS OCCURRING WHEN MAINTENANCE CHARGES ON NEW COMPUTERS ARE 25 TO 50 PERCENT LESS THAN THOSE OF THE PREDECESSOR PRODUCT LINE.
WELL, AS I SAID, THIS WHOLE MATTER OF EFFECTIVE PEOPLE BEGINS WITH SKILLED MANAGERS SO EDUCATION IN THAT REGARD IS PARAMOUNT. IN 1982, WE REFINED AND ADDED TO A CORE CURRICULUM FOR MANAGERS THAT INTEGRATES BOTH THE BASIC BUSINESS SKILLS OF FINANCE, ACCOUNTING, BUDGETING, DECISION MAKING, ETC., WITH THOSE SKILLS NEEDED TO MANAGE PEOPLE.

TODAY, THAT CORE LOOKS LIKE THIS:

(TRANSPARENCY #3 – 1983 MANAGEMENT CORE CURRICULUM 82 HOURS)

IN ADDITION, AN IMPRESSIVE ARRAY OF ADVANCED COURSES HAVE BEEN DEVELOPED SO THAT MANAGERS CAN CONTINUE THEIR SKILL GROWTH.

(TRANSPARENCY #4 – COMMUNICATIONS & INTERPERSONAL SKILLS)

THE * DENOTES COURSES ADDED IN 1982.

WHAT WE ARE DOING IS TO BUILD THE PRINCIPLES OF FAIR EXCHANGE INTO THESE EXISTING COURSES AND CURRICULUM. THE CASE STUDIES USED ILLUSTRATE THE PRINCIPLES AND THEIR APPLICATION. IN THIS WAY THE FAIR EXCHANGE CULTURE WILL BECOME THE NORM THROUGHOUT CONTROL DATA.

LET ME MOVE ON TO SOME OTHER ASPECTS OF FAIR EXCHANGE AND THE PEOPLE PART OF PPC.
IN SEPTEMBER, I REVIEWED THE "RINGS OF DEFENSE" STRATEGY DESIGNED TO INCREASE JOB SECURITY FOR EMPLOYEES.

(TRANSPARENCY #5 – RINGS OF DEFENSE STRATEGIES)

YOU WILL RECALL THAT THE NEED TO "EXERCISE" THE BUFFERS REPRESENTED BY OUTSIDE CONTRACT WORK AND SUPPLEMENTAL EMPLOYEE CAME ON US BEFORE THEY WERE FULLY DEVELOPED. NEVERTHELESS, THOSE RINGS PREVENTED THE FORCED LAYOFF OF SOME 2,000 EMPLOYEES. WE HAVE THROUGH ALL THIS MANAGED TO KEEP FORCED LAYOFFS TO LESS THAN 1.5 PERCENT OF TOTAL EMPLOYEES EVEN THOUGH TOTAL EMPLOYMENT IS DOWN SOME 4,000 PEOPLE. THIS WAS ACCOMPLISHED BY DEVELOPING A UNIQUE SET OF "INNER RINGS OF DEFENSE".

(TRANSPARENCY #6 – RINGS OF DEFENSE)

BUT LONG-TERM JOB SECURITY DEPENDS ON HOW WELL WE REBUILD THE "OUTER RINGS OF DEFENSE." WHAT THIS MEANS IN 1983 IS THAT GENERALLY WE WILL NOT REPLACE ATTRITION WITH FULL-TIME EMPLOYEES BUT RATHER WITH SUBCONTRACT AND SUPPLEMENTAL EMPLOYEES. EACH OPERATING DIVISION IS NOW CHARGED WITH PRODUCING A PLAN IN THIS REGARD.
THE EMPHASIS HERE HAS FIRST BEEN PLACED ON PREVENTION OF PROBLEMS. RECOGNIZING, HOWEVER, THAT SOME CONFLICT JUST CAN'T BE RESOLVED LOCALLY, EAR COMES INTO THE PICTURE.

DURING 1982, THE NUMBER OF STEPS THE GRIEVANCE AND EAR PROCESS WERE REDUCED TO MAKE THEM MORE RESPONSIVE AND TIMELY.

NEXT, IN 1982 A PROCESS WAS ESTABLISHED BY WHICH A PANEL OF EMPLOYEES, TOGETHER WITH AN EXECUTIVE, BUT UNDER THE GUIDANCE OF AN OMBUDSPERSON, REVIEWS AN UNRESOLVED PROBLEM AND MAKES RECOMMENDATIONS TO TOP MANAGEMENT. THIS PROCESS WAS TRIED FOR A NUMBER OF MONTHS IN THREE LOCATIONS. IN EACH OF THOSE LOCATIONS THE INTRODUCTION WAS PRECEDED BY THE TRAINING OF THE MANAGEMENT IN THE COURSES ON CONFLICT.

THAT PROCESS WORKED SO WELL (NOT ONE PANEL WAS NEEDED IN ANY OF THOSE LOCATIONS) THAT IN 1983 AND 1984 THE PROCESS WILL BE PUT IN PLACE THROUGHOUT THE U.S.

REINFORCEMENT OF PERFORMANCE/JOB AND CAREER SKILLS

IN THE INTEREST OF TIME, I WON'T GO INTO DETAIL WITH REGARD TO REWARD FOR PERFORMANCE. WE CONTINUE TO MAKE PROGRESS WITH REGARD TO JOB EVALUATION -- A NECESSARY PRECURSOR TO ANY EQUITABLE PERFORMANCE SYSTEM. ALSO, JOB AND CAREER SKILLS TRAINING CONTINUES TO IMPROVE.
ONE OF THE MOST SOUGHT AFTER COURSES WE NOW MAKE AVAILABLE TO INDIVIDUAL EMPLOYEES IS "LIFE PLANNING."

IT HELPS AN INDIVIDUAL TO REGAIN A PERSPECTIVE OF THE RIGHT BALANCE BETWEEN WORK LIFE AND PRIVATE LIFE, AND TO ESTABLISH GOALS THAT ENHANCE BOTH AS NECESSARY BALANCE IS RETURNED.

IT MAY NOT HAVE STRUCK YOU SO, BUT IN REALITY OUR EMPLOYEE ENTREPRENEURIAL ASSISTANCE PROGRAM IS VERY MUCH IN TUNE WITH THIS PRINCIPLE. TO DATE, 57 EMPLOYEES HAVE STARTED THEIR OWN BUSINESSES WITH CONTROL DATA'S HELP. ANOTHER 564 EMPLOYEES HAVE EXPLORED THE POSSIBILITY, BUT HAVE CHOSEN NOT TO DO SO. NEEDLESS TO SAY, THE LATTER GO BACK TO WORK MORE MOTIVATED, MORE PRODUCTIVE EMPLOYEES.

JUST LAST WEEK, AT OUR STAFF PLANNING MEETING, WE GAVE EACH OPERATING ORGANIZATION THE FOLLOWING OUTLINE TO DEVELOP WITH REGARD TO FURTHER FAIR EXCHANGE IMPLEMENTATION IN 1983. AS YOU CAN SEE, IT INCLUDES THE POINTS I HAVE JUST COVERED.

(TRANSPARENCY #7 – ORIENTATION OF TOP MANAGEMENT TO FAIR EXCHANGE)

WHEN WE FIRST BEGAN LOOKING AT FAIR EXCHANGE, THE QUESTION AROSE AS TO WHETHER WE SHOULD ESTABLISH A SEPARATE BUDGET FOR
THE DEVELOPMENT COSTS. INSTEAD, WE CHOSE TO REDIRECT OUR ALREADY EXISTING BUDGETS IN THE HUMAN RESOURCES FUNCTIONAL STAFFS TO TAKE ON A FAIR EXCHANGE FOCUS. RATHER THAN TAKE AN EXTRAORDINARY APPROACH: TO INSTEAD, EMBED THE FAIR EXCHANGE PRINCIPLES IN EVERYTHING THAT WE DID.

WE HAVE NOT, AS A CONSEQUENCE, INVESTED LOTS OF NEW DOLLARS IN FAIR EXCHANGE PER SE. YET, HERE WE ARE READY FOR A CONCENTRATED IMPLEMENTATION, BUT IN AN ORGANIZATION'S SPECIFIC FASHION RATHER THAN A CORPORATE-WIDE PROGRAM.

MANY OF YOU WERE PRESENT FOR CONTROL DATA'S 25TH ANNIVERSARY CELEBRATION. ALTHOUGH THAT WAS A VERY SUCCESSFUL EVENT, NOT MANY EMPLOYEES HAD THE OPPORTUNITY TO PARTICIPATE. MANY OF THE SESSIONS YOU ATTENDED WERE VIDEOTAPED. RATHER THAN SIMPLY SHARE THESE WITH EMPLOYEES WE WANTED TO GIVE SOME SIGNIFICANCE TO THE ANNIVERSARY EVENT FOR THEM AS WELL. CONSIDERING THE ECONOMIC TIMES, AND THE EMPHASIS BEING GIVEN TO THE SIGNIFICANCE OF EVERY EMPLOYEE'S CONTRIBUTION, WE CHOSE TO ASK THEM TO SHARE WITH US EVERY "BRIGHT IDEA" THAT THEY COULD IMPLEMENT THEMSELVES.

(TRANSPARENCY #8 – "BRIGHT IDEAS")

ONE OF THE BY-PRODUCTS OF "BRIGHT IDEAS" WAS THE STRENGTHENING OF LOCAL WORKING RELATIONSHIPS. TO UNDERSTAND THE POTENTIAL POWER OF THIS YOU NEED ONLY LOOK AT THE RESULTS OF "BRIGHT IDEAS."
PROCESS FLOW ANALYSIS – PROGRESS REVIEW – THE SECOND ELEMENT OF OPERATIONAL EFFECTIVITY IN OUR DRIVE TO IMPROVE PRODUCTIVITY IS PROCESS. THE CONCENTRATED EFFORT TO IMPROVE OUR PROCESSES WAS INITIATED A LITTLE OVER A YEAR AGO.

(PROTRANSPARENCY - #9 - PROCESS FLOW PROGRESS)

PROCESS FLOW ANALYSIS HAS EVOLVED SUBSTANTIALLY – BOTH IN HUMAN RESOURCE DEVELOPMENT AND IN THE VERY TOOL ITSELF. BETTER THAN 3000 EMPLOYEES HAVE BEEN TRAINED AT A COST OF ONLY $87,000 AND THEIR "KNOW-HOW" HAS BEEN APPLIED TO MORE THAN 500 PROCESSES.

THE RESULTS REALIZED ARE JUST BEING FELT – SUCCESS STORIES BEING REPORTED ARE IMPRESSIVE. FOR EXAMPLE:

OEM SPARES IN PHILADELPHIA HAS REDUCED ITS INVENTORY BY $800,000; AND ALSO HAS REFINED ITS PROCESS FOR AN ANNUAL SAVINGS OF $160,000.

U.S MARKETING RECENTLY HAD NEED TO REPLACE ITS CCRF SYSTEM -- A SYSTEM DEVELOPED IN THE LATE 60'S. AN OUTSIDE VENDOR QUOTED A REPLACEMENT SYSTEM AT $2.5 MILLION. BEFORE TAKING ANY ACTION, A PFA ON THE EXISTING SYSTEM WAS ORDERED. THE RESULT – A REDESIGNED SYSTEM BY CDC EMPLOYEES AT A COST OF $700,000. THIS OUTCOME REPRESENTED A COST AVOIDANCE TO CONTROL DATA OF $1.8 MILLION.
CDI IN BUSINESS DEVELOPMENT CONSOLIDATED ITS REGIONAL AND
DISTRICT ACTIVITIES FOR AN ANNUAL SAVINGS OF $1.3 MILLION.

THOSE ARE THREE SMALL EXAMPLES. TAKEN TOGETHER YOU CAN SEE
THAT THE 500 PROCESSES ALREADY UNDER ANALYSIS CAN ADD UP TO A
TREMENDOUS PROFIT IMPACT.

THE LAST BULLET ON THE CHART WHICH SAYS "EXECUTIVE LEVEL
PROCESSES" REFERS TO A LITTLE PROJECT WE PUT IN PLACE LAST
JULY. EACH EXECUTIVE REPORTING TO ME WAS ASKED TO DESIGNATE
FIVE MAJOR PROCESSES WHICH WOULD BE HIS PERSONAL PRIORITY. WE
ARE TRACKING THEIR PROGRESS AND NEXT JULY THERE IS A BEAUTIFUL
18K GOLD WATCH TO BE PRESENTED TO THE EXECUTIVE WHOSE PROCESS
IMPROVEMENT IS JUDGED TO BE GREATEST.

PFA FUTURE DIRECTION - WHILE ALL OF THE PFA TRAINING AND
PROCESS IMPROVEMENT ACTIVITY HAS BEEN IN PROGRESS, THE PROCESS
IMPROVEMENT OFFICE ITSELF HAS BEEN WORKING TO IMPROVE PFA
ITSELF THROUGH AUTOMATION.

(TRANSPARENCY #10 - PROCESS FLOW DIRECTION)

IN NOVEMBER 1981, WHEN WE KICKED OFF THE PFA PROGRAM, THE ONLY
MECHANICAL ASSISTANCE AVAILABLE WAS SOME SPECIAL WORD
PROCESSING PROGRAMS TO HELP IN THE DOCUMENTATION PROCEDURE THAT
IS PART OF PFA. TRAINING WAS ALL STAND-UP CLASSROOM STYLE. FIFTEEN MONTHS LATER -- BY APRIL 1, 1983 -- PFA PLATO WILL BE INSTALLED IN LEARNING CENTERS THROUGHOUT CONTROL DATA.


1. FULL DOCUMENTATION ON MAGNETIC DISK AND MAINTENANCE OF IT VIA THE CD110 VIDEO MONITOR THAT CAN BE ACHIEVED WITH RELATIVE EASE.

2. AN AUTOMATED TECHNIQUE FOR GENERATING PICTORAL FLOW CHARTS FROM THE TASK INVENTORY NARRATIVE OF PFA. THIS, I MIGHT ADD DECREASES PFA DOCUMENTATION TIME BY 35 PERCENT.

3. A REPORT PROGRAM THAT PRINTS A JOB DESCRIPTION FOR EACH FUNCTIONAL UNIT OF A PROCESS. THIS SHOULD SERVE AS A GREAT AID TO INDIVIDUAL JOB TRAINING.

4. A MANAGEMENT MONITORING MATRIX THAT TRACKS ANY PFA IN-PROGRESS ACTIVITY.
LATER THIS YEAR, A CD-110 EXPANDED PLATO COURSEWARE CAPABILITY WILL BE OFFERED FOR THE ANALYSIS PHASE OF PFA WHICH, OF COURSE, IS WHERE THE PAYOFF REALLY COMES.

IN EVALUATING OUR EXPERIENCE WITH PROCESS FLOW ANALYSIS AS AN INTEGRAL PART OF OUR PEOPLE/PROCESS/CAPITAL STRATEGY, YOU CAN ONLY SAY THE PROSPECTS FOR THE FUTURE ARE EXCITING! PFA IS MAKING ITS SPECIAL CONTRIBUTION TO AN EVER-IMPROVING OPERATIONAL EFFECTIVITY.

BECAUSE OF ITS PROGRESS WITHIN CONTROL DATA, AS YOU MIGHT GUESS, PFA LOOKS AS IF IT WILL HAVE A LARGER ROLE IN OUR PLANS. WITH A COMPREHENSIVE COMPUTER-BASED METHODOLOGY EMERGING THAT COMBINES TRAINING WITH DOING, ALLOWS FOR ALMOST AUTOMATIC "FALL OUT" OF JOB DESCRIPTIONS, AUTOMATES POLICIES, MANUALS AND PROCEDURES, IT'S CLEAR THAT THE MARKETING PROSPECT FOR SUCH A PRODUCT/SERVICE IS EXCELLENT. SINCE A UNIVERSAL NEED EXISTS IN ALL MARKETS FOR INCREASED PRODUCTIVITY A COMPUTER PACKAGED PFA HAS TREMENDOUS CONSULTING POTENTIAL FOR CDBAI.

CAPITAL REVIEW - WITH REGARD TO THE THIRD ELEMENT OF OUR FORMULA FOR IMPROVED PRODUCTIVITY - CAPITAL - WE CONTINUE TO IMPROVE ON THE ALREADY GOOD JOB DONE IN RECENT YEARS. THIS IS TRUE BOTH IN TERMS OF FUNDING THE BUSINESS AT A REASONABLE COST AND IN TERMS OF REDUCING WORKING CAPITAL NEEDS FOR RECEIVABLES AND INVENTORY. AS I SAY, PROGRESS CONTINUED IN 1982. LET ME GIVE YOU A FEW EXAMPLES.
(TRANSPARENCY #11 - RECEIVABLE CHART)

ON THIS CHART WE SEE THAT THE 1981 QUARTERLY REVENUE COMPARED TO RECEIVABLE BALANCES INDICATES THAT DURING 1981 WE WERE SEEING AN IMPROVEMENT ON A QUARTER BY QUARTER BASIS. WHEN THE ECONOMY SLOWED DOWN SIGNIFICANTLY DURING THE SECOND HALF OF 1981 WE THOUGHT THERE WAS A POTENTIAL FOR SIGNIFICANT INCREASE IN OUR RECEIVABLE AND A DETERIORATION IN OUR PERFORMANCE INDICATORS.

(OVERLAY)

AS YOU CAN SEE FROM THIS OVERLAY, HOWEVER, THE REVERSE HAPPENED. THE IMPROVEMENT SEEN IN 1981 CONTINUED AGAIN ON A QUARTERLY BASIS. AS A MATTER OF FACT, THE AVERAGE DAYS OUTSTANDING FOR THE ELECTRONIC INDUSTRY (AS PUBLISHED BY THE CREDIT RESEARCH FOUNDATION) IS 49 DAYS AND IT HAS DETERIORATED 7 PERCENT FROM LAST YEAR. AT THE SAME TIME OUR DAYS OUTSTANDING HAVE IMPROVED FROM 42 DAYS LAST YEAR TO THE CURRENT LEVEL OF 37 DAYS. WE ARE CURRENTLY 24 PERCENT BETTER THAN THE INDUSTRY AVERAGE AND THE GAP IS WIDENING.

ANOTHER EXAMPLE OF OUR INCREASED EFFORT TO INCREASE THE VELOCITY OF TURNING WORK PERFORMED FOR A CUSTOMER INTO CASH IS IN WHAT HAS BEEN DONE WITH THE GOVERNMENT CONTRACT RENEWALS.
IN THE PAST OUR RECEIVABLES HAVE INCREASED AFTER THE START OF
THE U.S. GOVERNMENT'S FISCAL YEAR ON OCTOBER 1ST. LAST YEAR,
BY DECEMBER 31, 1981, WE HAD RENEWED 33 PERCENT OF OUR
GOVERNMENT CONTRACTS. THROUGH A WELL ORGANIZED PROGRAM THIS
YEAR U.S. MARKETING HAS RENEWED 95 PERCENT OF THE CONTRACTS.
THIS REPRESENTS $18M IN IMPROVED CASH FLOW COMPARED TO LAST
YEAR.

(TRANSPARENCY #12 - INVENTORY CHART)

INVENTORY GREW DURING 1981 IN ANTICIPATION OF CONTINUED GROWTH
IN SHIPMENTS. THE DECREASE IN THE FOURTH QUARTER WAS MORE A
RESULT OF LARGE YEAR-END SHIPMENTS THAN A RESULT OF ANY ATTEMPT
TO DECREASE THE INPUT INTO OUR MANUFACTURING PROCESS.

(OVERLAY)

AS WE MOVED INTO 1982 AND IT BECAME APPARENT THAT THE SLOWDOWN
IN BUSINESS WHICH STARTED IN THE SECOND HALF OF 1981 WOULD
CONTINUE. WE TOOK ACTIONS TO BRING INVENTORY BACK IN LINE WITH
THE BUSINESS PROSPECTS. INVENTORY HIT A PEAK IN MAY. BY
YEAR'S END IT WAS DOWN $92M FROM THAT LEVEL. THE MAJOR
PROBLEMS WE HAVE HAD WERE PRIMARILY IN, BUT NOT LIMITED TO,
OEM. THE OEM INVENTORY WAS REDUCED BY SIGNIFICANT REDUCTIONS
IN BOTH LABOR AND PARTS INPUT INTO THE MANUFACTURING PROCESS.
THE OEM INVENTORY REACHED A HIGH IN MARCH OF $359M AND WILL END
THE YEAR DOWN SOME $90M FROM THAT LEVEL.
I SHOULD ADD A NOTE HERE THAT THE OEM INVENTORIES WILL BEGIN TO 
INCREASE AS WE MOVE INTO 1983. WE HAVE TEN NEW PRODUCT WHICH 
WE WILL BEGIN SHIPPING IN THE SECOND HALF OF THE YEAR. VOLUME 
SHIPMENTS WILL BE LIMITED DURING 1983 -- IT WILL BE 1984 BEFORE 
THAT OCCURS -- BUT SOME INVENTORY BUILD-UP IS A NECESSARY 
PRECURSOR TO THAT.

(TRANSPARENCY #13 - DEBT, EQUITY INVESTED CAPITAL CHART)

THE RECEIVABLES AND INVENTORY STATUS WE HAVE SEEN IN THE 
PREVIOUS CHARTS PLUS LEASED EQUIPMENT ARE THE KEY ELEMENTS THAT 
ARE INCLUDED IN INVESTED CAPITAL. INVESTED CAPITAL INCREASED TO 
A HIGH IN JUNE AND HAS DECREASED SINCE THEN. THE EQUITY HAS 
INCREASED BUT NOT AS RAPIDLY AS BUDGETED. PRIMARILY AS A 
RESULT OF CONTINUED IMPROVEMENT IN OUR ASSET PERFORMANCE, DEBT 
HAS BEEN DECREASING SINCE JUNE. IT WILL END THE YEAR $120M 
BELOW PLAN. FOR THE YEAR, DEBT AVERAGED SOME $75M BELOW PLAN 
AND THAT EQUATES TO ABOUT A $12M SAVINGS IN INTEREST.

SO WITH REGARD TO CAPITAL -- THE THIRD ELEMENT OF PPC -- WE 
ALSO PERFORMED QUITE WELL. CLEARLY, IN HINDSIGHT, WE WERE 
OVER-PRODUCING AT THE START OF THE YEAR. BUT BY THE END OF THE 
FIRST QUARTER, WHEN A SECOND HALF RECOVERY WAS PROBLEMATICAL, 
ACTIONS WERE TAKEN AND THE RESULTS WERE WHAT YOU JUST SAW.
I WANT TO ADD HERE THAT THE NEW YEAR DID NOT THROW A MAGIC SWITCH IN THE REVENUE PICTURE. OEM REVENUES CONTINUE TO DECLINE. OEM REVENUES IN THE SECOND QUARTER WILL BE THE LOWEST IN TWO AND ONE-HALF YEARS. WE THEN EXPECT THEM TO TURN UP AGAIN. DATA SERVICES GROWTH WILL ALSO BE BELOW NORMAL IN 1983. SO WE HAVE A STRUGGLE -- ESPECIALLY IN THE EARLY MONTHS OF 1983 -- WITH REGARD TO REVENUE. THE DIFFERENCE AS WE ENTER THIS NEW YEAR, COMPARED TO LAST YEAR, HOWEVER, IS THE COMBINED EFFECT OUR ACTIONS WITH REGARD TO PPC WILL MAKE WITH REGARD TO COSTS AND EXPENSES.

(ALSO) I DON'T WANT TO LEAVE YOU WITH THE FEELING THAT ALL IS DISMAL WITH REGARD TO GROWTH -- IN EVERY PART OF OUR BUSINESS THERE ARE EXCITING NEW PRODUCTS FOR 1983 WHICH WILL HELP BOOST REVENUE.

THE MOST RECENT COMPUTER SYSTEMS NEWS OCCURRED AT THE TOP AND THE BOTTOM ENDS OF THE CYBER LINE. LAST WEEK WE INTRODUCED SEVEN NEW MODELS OF THE CYBER 205 -- DOUBLING THE UPPER MEMORY SIZE FROM FOUR MILLION TO EIGHT MILLION WORDS WHILE SLASHING THE COST OF A MILLION WORDS OF MEMORY BY TWO-THIRDS.
MEANWHILE, AT THE BOTTOM END OF THE CYBER 170 SERIES 800 LINE, WE SCORED A SIGNIFICANT SUCCESS WITH THE NEW, SMALLEST SYSTEM -- THE 815 -- AT THE INTERNATIONAL SHOW IN COMPUTER-AIDED ENGINEERING DESIGN IN PHILADELPHIA. WE PACKAGED THIS SMALLEST CYBER YET -- NICKNAMED CYBER-MINI -- WITH COMPUTER-AIDED DESIGN SOFTWARE, AND WERE ONE OF THE BRIGHTEST STARS OF THE SHOW.

COMPUTER SYSTEMS AND GOVERNMENT SYSTEMS ARE COLLABORATING IN A NEW R & D PROGRAM TO DEVELOP AN ELECTRONIC COMPUTER-AIDED DESIGN SYSTEM USING A CYBER WITH AN ATTACHED PROCESSOR CALLED ADVANCED FLEXIBLE PROCESSOR (AFP) ORIGINALLY DEVELOPED FOR CLASSIFIED GOVERNMENT WORK.

GOVERNMENT SYSTEMS CONTINUES TO BUILD ON ITS SUCCESS WITH THE U.S. NAVY'S STANDARD AIRBORNE COMPUTER, THE AYK-14. IN RECENT MONTHS, PRODUCTION HAS INCREASED AND WILL SOON BE AT THE 60 UNITS PER MONTH LEVEL. OVER THE LIFE OF THAT PROGRAM, IT WILL YIELD MORE THAN $1B IN REVENUE.

THE AIR FORCE AND ARMY, LIKewise, ARE LOOKING FOR A STANDARD AIRBORNE SYSTEM. WE NOW HAVE THE SOLE DEVELOPMENT CONTRACT FOR A PROGRAM CALLED NEBULA. PROTOTYPING IS GOING ON NOW.
ENGINEERING SERVICES HAS EXPANDED THE RANGE OF ITS IBM SYSTEMS MAINTENANCE CAPABILITIES AND NOW COVERS THE ENTIRE IBM LINE. IN ADDITION, ENGINEERING SERVICES JUST OPENED 25 NEW SERVICE CENTERS AND IS CONTINUING ITS PROGRAM OF CENTRALIZED SUPPORT WITHOUT ANY DECREASE IN LEVEL OF CUSTOMER SATISFACTION. ALL OF THIS IS NOT JUST AN INCOME PRODUCER FOR ENGINEERING SERVICES, BUT MORE IMPORTANTLY AN ADJUNCT SERVICE WHICH IMPROVES THE APPEAL OF CONTROL DATA PERIPHERALS TO THE OEM'S.

LIKELYWISE, IN DATA SERVICES, THERE ARE NEW THINGS COMING. ON THE OTHER HAND, IF THERE IS ONE PRODUCT AREA WHERE I FEEL WE ARE SOMEWHAT LAGGING IN NEW PRODUCT INTRODUCTION, IT IS DATA SERVICES. BUT THE CYBERNET 205 PROGRAM CONTINUES TO SET NEW REVENUE RECORDS, AND AT THE OTHER END OF THE SCALE, BY YEAR'S END SEVERAL NEW SERVICES INCORPORATING THE USE OF MICROCOMPUTERS WILL BE AVAILABLE.

NEW COURSEWARE AND INFORMATION SERVICES CONTINUE TO FLOW FROM THE EDUCATION, SMALL BUSINESS, HEALTHCARE, URBAN AND RURAL SERVICE GROUPS. LIKELYWISE, NEW FINANCIAL SERVICES FOR SMALL BUSINESS AND HOMEOWNERS SHOULD GIVE COMMERCIAL CREDIT A BOOST. THE MORTGAGE ORIGINATION CAPABILITY FOR ERA BROKERS BY ITSELF REPRESENTS A SIGNIFICANT CHANGE FROM 1982 TO 1983 IN OUR INCOME GENERATING CAPABILITY IN COMMERCIAL CREDIT.
AND FINALLY, IN THE NEW PRODUCT AREA, 1983 FOR PERIPHERALS IS WHEN THE NEW IBM 3380 COMPATIBLE DISK DRIVE BEGINS DELIVERY. AS I MENTIONED, THAT IS JUST ONE OF TEN NEW PERIPHERAL PRODUCTS SLATED FOR 1983, BUT IT IS PROBABLY THE MOST EMOTIONAL ONE BECAUSE OF THE INTENSE COMPETITION WITH STORAGE TECHNOLOGY CORPORATION AND MEMOREX TO BE FIRST TO MARKET. THE FIRST OF THESE NEW DISK SUBSYSTEMS WAS INSTALLED AT COMMONWEALTH EDISON IN CHICAGO IN LATE DECEMBER. TOM AND HIS PEOPLE BEAT THEIR COMPETITION BY AT LEAST THREE MONTHS -- SO THAT AT LEAST WAS A GOOD WAY TO KICK OFF THE NEW YEAR.

THIS HAS BEEN A BIT LONGER REPORT THAN USUAL, BUT I DID WANT TO GIVE YOU SOME FLAVOR OF THE INTENSE LEVEL OF ACTIVITY THAT IS GOING ON TO COMBAT THE DISMAL ECONOMIC SCENE WHICH SURROUNDS US. ALL IN ALL, WE'RE LOOKING FORWARD TO RENEWED PROGRESS IN 1983.

THANK YOU. QUESTIONS?