GOOD MORNING!

TO REVIEW THE STRATEGIC PLAN, I WILL FIRST COVER THE OVERALL THRUST OF THE COMPUTER GROUP STRATEGIC PLAN, THE FINANCIAL OBJECTIVES AND A FEW WORDS ON BASIC BUSINESS STRATEGY FOR EACH MAJOR SEGMENT OF OUR GROUP.

THEN EACH BUSINESS EXECUTIVE WILL SPEND A FEW MINUTES GIVING YOU SOME PERSPECTIVE WITH REGARD TO THE RANGE OF PROFIT EXPECTATION INHERENT IN THE PLAN AS WELL AS COMMENTS ON MAJOR INVESTMENTS FOR THE FUTURE.

THE PRIMARY THRUST IN THE STRATEGIC PLAN IS PROFITABILITY AND STRETCH AND THE PLANNING PROCESS ITSELF HAS BEEN AGAIN REFINED AND IMPROVED IN BOTH PRODUCT FAMILIES AND GEOGRAPHIES.

TO A MUCH GREATER EXTENT THAN EVER BEFORE WE HAVE CHALLENGED EACH OF OUR BUSINESSES TO RESPOND TO AGGRESSIVE BUSINESS OBJECTIVES DEVELOPED THROUGH ANALYSIS OF BUSINESS FUNDAMENTALS. PARTICULARLY TO IMPROVE PRODUCTIVITY OF EVERY FUNCTION IN THE BUSINESS.

COMMUNICATION HAS BEEN IMPROVED IN THE PLANNING PROCESS THIS YEAR, AS EACH COUNTRY/REGION PROVIDED PRODUCT FAMILIES WITH COMPREHENSIVE ASSESSMENTS OF THEIR OVERALL BUSINESS ENVIRONMENT, MARKET SEGMENTS, COMPETITION AND PRODUCT LINE/SERVICE NEEDS. PRODUCT FAMILIES IN TURN SUPPLIED THE MARKETING ORGANIZATION WITH PRODUCT LINE/SERVICES STRATEGIES. THE FINAL RESULT WILL
ENABLE US TO MORE CLOSELY MATCH OUR PRODUCT/OFFERINGS/ACTIVITIES WITH EXISTING AND FUTURE MARKET OPPORTUNITIES. BUSINESS INTELLIGENCE RESULTING FROM THIS INTEGRATION OF STRATEGIC PLANNING HAS PROVIDED US WITH A HIGHER CONFIDENCE LEVEL WHICH WILL ALLOW US TO IMPROVE OUR FINANCIAL PERFORMANCE IN THE NEAR AND LONGER TERM, AND OBTAIN ACCEPTABLE RETURNS ON REVENUES AND INVESTMENT.

CHART I

IN THAT REGARD, THIS FIRST CHART COMPARES THIS YEAR'S PLAN WITH LAST YEAR'S. THERE IS GOOD AND BAD IN THIS COMPARISON AS YOU CAN SEE BUT MOST IMPORTANT IS WE ARE OUT-PERFORMING IN ACTUALS WHAT WE HAD IN LAST YEAR'S PLAN FOR 1977. BOTH OUR ACTUAL FINANCIAL PERFORMANCE AND FUTURE EXPECTED PERFORMANCE LOOKS BETTER THAN THIS TIME LAST YEAR.

I. FINANCIAL OBJECTIVES

CHART II

INTEREST BEARING DEBT IS SEGREGATED FOR PLANNING PURPOSES INTO CCC DEBT AND OTHER OR "EXTERNAL" ("BANK") DEBT. CCC DEBT IS ASSOCIATED WITH REVENUE PRODUCING ASSETS SUCH AS LEASED AND DATA CENTER EQUIPMENT. BANK DEBT CAN BE CATEGORIZED AS BEING ASSOCIATED WITH NON-REVENUE PRODUCING ASSETS AS INVENTORY AND RECEIVABLES.

AS A RESULT OF ASSET MANAGEMENT AND EQUITY IMPROVEMENT BOTH CCC DEBT AND BANK DEBT ARE DECREASING OVER THE PLANNING HORIZON.

THE OVERALL DEBT TO EQUITY RATIO IS REDUCED BY ABOUT HALF, FROM 1.50 IN 1977 AS CURRENTLY FORECAST TO .7 IN 1981. IN COMPARISON, LAST YEAR'S PLAN WAS 1.87 IN 1977 AND .9 IN 1981. SO, MUST FAR WE ARE AHEAD... AND AHEAD WHERE IT COUNTS... UP FRONT.

THE IMPACT OF THE BALANCE SHEET IMPROVEMENTS WILL BE EVIDENT IN THE FOLLOWING CHARTS.

FOR EXAMPLE:

CHART III

TO ACHIEVE THESE GOALS, CASH FLOW AT THE BOTTOM OF THE CHART OVER THE PLANNING PERIOD IS POSITIVE AND IMPROVES FROM THIS YEAR'S $0.4 MILLION TO $73.1 MILLION. THE 1982 NUMBER IS NO DOUBT MORE OF A TYPICAL LONG RANGE PLAN NUMBER -- BUT THAT'S NOT THE POINT. THE NEAR TERM NUMBERS ARE FAIRLY HARD AND THEY
MEAN THAT A BASE IS BEING ESTABLISHED WHICH COULD INDEED YIELD LARGE POSITIVE CASH FLOWS IN THE EARLY 1980's IF THAT IS REQUIRED.


THE 1978 PRE-TAX PROFIT COMMITMENT IS $77.6 MILLION. THAT REPRESENTS AN INCREASE OVER 1977 OF 40%.

CHART IV

THE NEXT CHART SHOWS TECHNICAL EFFORT, G&A AND INTEREST AND OTHER EXPENSE WILL DECREASE AS A PERCENT OF REVENUE. MARKETING IS PLANNED TO INCREASE. THIS IS THE SAME PROFILE WE PLANNED A YEAR AGO.
CHART V

TECHNICAL EFFORT IS PERHAPS THE KEY INVESTMENT IN OUR BUSINESS. THE NEXT CHART SHOWS THAT WE EXPECT INCREASING PRODUCTIVITY (IN TERMS OF REVENUE PRODUCTIVITY) FROM TECHNICAL EFFORT EXPENDED . . . EACH YEAR REVENUE GROWS FASTER THAN THE TECHNICAL INVESTMENT. TO SOME DEGREE THIS REFLECTS THE GROWING MATURITY OF OUR BUSINESS BUT IT ALSO REFLECTS A CONSCIOUS MANAGEMENT STRATEGY TO OBTAIN GREATER LEVERAGE FROM MONIES EXPENDED. THE CONSOLIDATION OF OPERATING SYSTEMS, THE REDUCTION TO A SINGLE HARDWARE LINE IN SYSTEMS, ACQUISITION AS OPPOSED TO DEVELOPMENT OF DATA SERVICES, APPLICATIONS, STANDARD MODULES IN TERMINALS ARE A FEW EXAMPLES THAT COME TO MIND.

CHART VI

THE NEXT CHART SHOWS TECHNICAL EFFORT FOR EACH MAJOR BUSINESS SEGMENT. I WON'T DWELL, JUST POINT OUT THAT IN TERMS OF TECHNICAL EFFORT INTENSITY SYSTEMS, PERIPHERAL PRODUCTS, SERVICES.

CHART VII

THIS NEXT CHART SUMMARIZES, THEN, THE EFFECT OF ASSET AND EXPENSE CONTROL PROGRAMS ALONG WITH MARKETING PROGRAMS FOR THE REVENUE GROWTH.
RETURN ON INVESTMENT (AVERAGE ASSETS DIVIDED BY NET PROFIT BEFORE TAX PLUS INTEREST) RISES FROM 9.2% IN 1977 TO 19.8% IN 1982.
AGAIN, PERHAPS MOST SIGNIFICANT IS THE TRANSITION FROM 1977 TO 1978 WHEN WE WILL FOR THE FIRST TIME SINCE THE 1960’s EARN MORE THAN THE COST OF MONEY.

IN 1980 OUR INDICATED NPBT OF $162.5 MILLION OR 8.4% ON REVENUE YIELDS A NPAT OF ABOUT $76.0 MILLION DEPENDING ON THE TAX RATE MIX OF U.S. AND INTERNATIONAL. THAT IS A 4.0% RETURN ON REVENUE. OUR GOAL SHOULD BE SOME 25% HIGHER THAN THAT AT $96 MILLION OR A 5.0% RETURN ON REVENUE, BUT AT THE PRESENT TIME THE INDICATED RETURN IS ALL THAT I CAN SEE. EVEN THAT IS VERY AGGRESSIVE FROM OUR CURRENT LEVEL OF PERFORMANCE. PERHAPS IF WE CAN ACHIEVE THE INDICATED STRETCH FROM 1977 TO 1978 THEN WE WILL FIND THE NEXT STEP COMES MORE EASILY.

OVER THE PAST 3 MONTHS WE HAVE PROBED AND TESTED THE PLAN TO ACHIEVE A BETTER LEVEL OF PERFORMANCE. THE TIME HAS COME FOR STRETCH. STRETCH MEANS NEW PLATEAUS -- DIFFERENT WAYS OF OPERATING. THESE PAST THREE MONTHS HAVE BEEN VERY ACTIVE ONES IN DESIGNING AND IMPLEMENTING PROGRAMS TO RAISE THE TARGET LEVELS. WE ARE NOW WELL ALONG IN THE PROCESS OF PUTTING TOGETHER OPERATIONAL PLANS AND BUDGETS TO MEET THESE TARGET LEVELS (OR BUDGET GUIDELINES).
II. BASIC BUSINESS STRATEGY

THERE ARE THREE BROAD CATEGORIES OF ISSUES FACING US, FROM AN OVERALL BUSINESS POINT OF VIEW:

1. **FIXING LOSERS** - By fixing them, I mean fixing, not abdicating. Every major business segment (systems, services & peripherals) has pockets of losing operations - both in terms of geography and product lines. Fortunately, we have fewer losers today than last year or the year before that or etc. But there are today -- right now -- more losers than winners in every product family. SO THE LEVERAGE FOR IMPROVEMENT IS GREAT

2. **ACHIEVING BASIC OPERATING EFFICIENCIES IN PROFITABLE ENTERPRISES** - Assets -- better programs than elsewhere, G.P. -- Arbitron G.P., Admin. -- 5 million in Europe. There is easily (20) million lying there to be had -- how crazy to waste it when we could be doing full things instead.

3. **DEVELOPING NEW BUSINESS THRUSTS**, ALL THREE ARE ESSENTIAL AND ARE ADDRESSED IN THE BUSINESS SEGMENT PLANS THAT FOLLOW.
CHART VIII  SYSTEMS

SYSTEMS COMPRISSES THREE BUSINESS SEGMENTS; EDP, AEROSPACE, AND INSTRUMENTS & CONTROLS.

FOR SYSTEMS, I WILL UPDATE WHAT I SAID LAST YEAR. "OUR COMPUTER SYSTEMS BUSINESS MUST BE MADE PROFITABLE AT ITS CURRENT VOLUME OF BUSINESS". THIS YEAR WE WILL DO THAT. CONTROL DATA IS STRONG IN ITS CURRENT MARKETS. BEAR IN MIND THAT WITH THE REQUIREMENTS FOR CONTINUING PRICE/PERFORMANCE IMPROVEMENT FOR THE MARKETPLACE, WE WILL HAVE TO RUN LIKE HELL JUST TO STAY EVEN IN TERMS OF UNITS AND REVENUE DOLLARS. DOING THAT ON AN UNPROFITABLE BASE IS FRUITLESS AND DEMORALIZING. BUT, WE HAVE MADE GREAT PROGRESS OVER THE LAST THREE YEARS AND ARE ON THE VERGE OF REASONABLE PROFITS AT CURRENT VOLUMES. AND THE PLAN EMPHASIZES THIS MODEST REVENUE GROWTH/HEAVY CONCENTRATION ON PRODUCTIVITY AND PROFITABILITY FOR SYSTEMS.

LET ME TAKE A FEW MINUTES TO BE MORE SPECIFIC ABOUT THE FUTURE OF THE THREE SEGMENTS OF OUR TOTAL SYSTEMS BUSINESS -- --

CHART IX  EDP SYSTEMS

THE GEOGRAPHIC MARKET FOR EDP SYSTEMS IS WORLDWIDE ALTHOUGH 80 PERCENT OF THE INSTALLED SYSTEM BASE IS LOCATED IN THE U.S. AND WEST EUROPE. IN 1977, WITHIN THESE GEOGRAPHIES, 60 PERCENT
OF THE TOTAL REVENUE BASE IS CURRENTLY CONCENTRATED IN SEVEN KEY INDUSTRY SECTORS, PRIMARILY IN THE SCIENTIFIC, ENGINEERING AND EDUCATION AREAS. BY 1982 IT IS PLANNED THAT 80% OF THE TOTAL REVENUE BASE WILL BE CONCENTRATED IN THESE INDUSTRIES.

TWO KEY FACTORS FOR FUTURE SUCCESS IN THE EDP SYSTEMS BUSINESS ARE CONTINUED PENETRATION OF OUR TARGET INDUSTRIES AND A CAREFULLY PLANNED AND IMPLEMENTED MIGRATION STRATEGY FROM THE PRESENT 170 PRODUCT LINE TO THE SUCCESSOR LINE.

FURTHER PENETRATION OF THE TARGETED INDUSTRIES WILL BE MADE THROUGH MORE APPLICATION ORIENTED SYSTEM SALES. ALTHOUGH WE ARE STRONG TODAY IN THESE INDUSTRIES WE, IN FACT, OFFER ONLY TWO TOTAL APPLICATION SOLUTIONS IN THE FORM OF OUR POWER NETWORK CONTROL SYSTEMS FOR ELECTRIC UTILITIES AND PLATO FOR EDUCATION. ITS THESE TYPES OF TOTAL SOLUTIONS WHICH MUST BE DEVELOPED AND SOLD TO OTHER INDUSTRIES -- PETROLEUM, WEATHER, AND MANUFACTURING FOR EXAMPLE. WE ARE MORE CONVINCED THAN EVER THAT INCREMENTAL MARKET SEGMENTS WILL GENERATE SYSTEMS BUSINESS BECAUSE OF DATA SERVICES. I MENTIONED CBE. DATA COMMUNICATIONS IS ANOTHER EXAMPLE. SO ARE PRIVATE DATA BASE APPLICATIONS SUCH AS FIRMTEC AND SKILTEC.

CHART X

THE ATTENTION ON APPLICATIONS AND TOTAL INDUSTRY SOLUTIONS WILL RESULT IN A SHIFT OF REVENUE FROM HARDWARE TO SOFTWARE, WITH SOFTWARE RELATED REVENUES APPROACHING 30% OF THE TOTAL BY 1982.
THIS IS AN IMPORTANT TRENDS IN THAT IT REFLECTS PAYMENT TO CDC FOR ITS TOTAL KNOWLEDGE OF APPLICATIONS AS OPPOSED TO UNIQUENESS OF HARDWARE -- SOMETHING WHICH WILL BE MORE AND MORE DIFFICULT TO OFFER IN THE FUTURE.

THE OTHER FACTOR -- MIGRATION STRATEGY -- IS RECEIVING MAJOR EMPHASIS AND IS EMBODIED MAINLY IN THE SOFTWARE OPERATING SYSTEM AND THE CAPABILITY OF THAT SOFTWARE TO OPERATE THE NEW HARDWARE EFFICIENTLY IN BOTH THE CY-170 AND ADVANCED 170 MODE.

EDP SYSTEMS IS RUNNING AHEAD OF ITS 1977 PROFIT BUDGETS. IN 1978 WE WILL BUDGET TO EXCEED THE $300 MILLION REVENUE LEVEL. THAT IS THE POINT BEYOND WHERE MOST OF THE INCREMENTAL GROSS PROFIT GOES TO THE BOTTOM LINE.

CHART XI  AEROSPACE

I DON'T HAVE TO REMIND YOU THAT WE'VE HAD PROBLEMS IN AEROSPACE DURING THE PAST TWO YEARS. THESE PROBLEMS HAVE BEEN RELATED MOSTLY TO NON-AEROSPACE TYPE PROJECTS UNDERTAKEN BY COMPUTING DEVICES OF CANADA. THE MOST SERIOUS PROBLEM IS, OF COURSE, THE MAPP TORONTO POST OFFICE PROGRAM. PROGRESS ON THAT PROGRAM IS BEING MADE, HOWEVER, AND THE CANADIAN GOVERNMENT APPEARS TO BE IN A MORE COOPERATIVE MOOD. THEY HAVE, IN FACT, PAID US RECENTLY FOR MILESTONES ACCOMPLISHED AND AGREED TO SOME ADDITIONAL FUNDING.
WHEN WE LOOK AT THE PURE AEROSPACE/MILITARY ACTIVITIES WE SEE A BUSINESS THAT IS COMPLEMENTARY TO OUR COMPUTER SYSTEMS BUSINESS. THE AEROSPACE PROGRAMS REPRESENT GOVERNMENT FUNDED PROGRAMS IN LEADING EDGE TECHNOLOGY. THESE PROJECTS AND THEIR RESULTING PRODUCTS OFFER A REASONABLE RETURN ON ASSETS IN THE MILITARY/AEROSPACE ENVIRONMENT BUT PERHAPS MORE IMPORTANTLY, THE FALL-OUT OF THESE PROGRAMS AND PRODUCTS RESULT IN ADVANCED TECHNOLOGY FOR COMMERCIAL PRODUCTS SUCH AS OUR DIGITAL IMAGE CYBER-IKON SYSTEMS WHICH ARE USED IN OIL AND MINERAL EXPLORATION AND CROP PREDICTION IN AGRICULTURE.

WE RECOGNIZE THAT WE ARE IN A "TURNAROUND" SITUATION IN AEROSPACE AND THAT THE DANGER IN SUCH A SITUATION IS A YEAR BY YEAR SLIP IN THE RECOVERY. WE BELIEVE THAT WE HAVE THE MAJOR PROBLEMS UNDER CONTROL AND WE HAVE OUR STRATEGY PROPERLY DEFINED FOR THE FUTURE. 1978 WILL BE A KEY INDICATOR IN OUR PROGRESS OF RECOVERY FOR AEROSPACE.

INSTRUMENTS AND CONTROLS

THE AUTOCON DIVISION OF INSTRUMENTS AND CONTROLS HAS ONE OF THOSE RARE OPPORTUNITIES -- THAT IS, A RAPIDLY GROWING AND DEMANDING MARKET OPPORTUNITY WHERE OUR PRODUCTS AND OUR APPLICATION KNOW-HOW ARE CLEARLY SUPERIOR. OUR ENERGY MANAGEMENT SYSTEMS OFFER SOLUTIONS TO POWER DISTRIBUTION CONTROL AND MONITORING WHICH IS CRITICAL TO ENERGY CONSERVATION AND A KEY FACTOR IN THE ABILITY
OF ELECTRIC UTILITY COMPANIES TO PROVIDE UN-INTERRUPTED SERVICE TO USERS. ONE OF OUR SYSTEMS WOULD MOST LIKELY HAVE PREVENTED THE RECENT EAST COAST BLACKOUT.

WE PRESENTLY HAVE POWER NETWORK CONTROL PROGRAMS WITH SIX MAJOR ELECTRIC UTILITY COMPANIES AND ARE IN FINAL NEGOTIATIONS WITH THE COUNTRY OF EGYPT FOR A 40 MILLION DOLLAR PROJECT.

OUR CHALLENGE IS TO MAINTAIN A MAJOR MARKET SHARE OF THE POWER NETWORK CONTROL BUSINESS WHICH WILL REQUIRE A GROWTH RATE OF NEARLY 30% PER YEAR IN AUTOCON. THIS DIVISION FOR THE PAST SEVERAL YEARS HAS TYPICALLY MORE OR LESS GONE IT ALONE. THE SHORTAGE OF OUTSIDE RESOURCES IN THE RELATIVELY NEW FIELD OF TECHNOLOGY WILL REQUIRE DEVELOPMENT AND USE OF RESOURCES FROM OTHER PARTS OF THE GROUP.

THIS MEANS AN INCREASING DEPENDENCE ON EDP SYSTEMS MARKETING, ENGINEERING SERVICES, AND PSD FOR AUTOCON. OUR STRATEGY CALLS FOR

**CHART XII**

- STANDARDIZATION OF SOFTWARE AND HARDWARE TO ALLOW LESS EXPENSIVE IMPLEMENTATION OF MAJOR POWER NETWORK CONTROL PROJECTS

- BECOMING MORE SELF-SUFFICIENT IN PROVIDING APPLICATIONS SOFTWARE
DEVELOPING NEW APPLICATIONS TO BROADEN OUR PRODUCT OFFERING IN AREAS SUCH AS SUB-STATION CONTROL AND MONITORING AND POWER LOAD MANAGEMENT

AND

THE DEVELOPMENT OF INTERNATIONAL MARKETS THROUGH SELECTED DIRECT SALES AND THROUGH COOPERATIVE AGREEMENTS WITH OTHER MULTI-NATIONAL COMPANIES SUCH AS ASEA IN SWEDEN.

CHART XIII PERIPHERAL PRODUCTS

IN PERIPHERAL PRODUCTS WE HAVE AN OPPORTUNITY TO CAPITALIZE ON SIGNIFICANT GROWTH IN OUR MARKETS, WHILE AT THE SAME TIME CONTINUING TO ACHIEVE IMPROVED RATES OF PROFITABILITY AND RETURNS ON INVESTMENT. INHERENT IN THIS IMPROVEMENT ARE PLANS FOR BETTER DEPLOYMENT OF BOTH ASSETS AND TECHNICAL EFFORT.

IMPROVED ASSET RATIOS AND GROSS MARGINS SHOULD BE REALIZED THROUGH CONCENTRATION ON STANDARD PRODUCTS AND PRODUCT MODULES FOR BOTH INTERNAL AND EXTERNAL USE. IN ADDITION, PERIPHERALS HAVE, OVER THE COURSE OF THE LAST TWO YEARS, ADOPTED A MUCH TOUGHER ATTITUDE TOWARD COST DEFERRALS AND OTHER "MORTGAGE THE FUTURE" APPROACHES, SO THAT THE BUSINESS IS FINANCIALLY STRONGER THAN IN THE PAST.
PERIPHERALS HAS BEEN ABLE TO BUDGET 1977 CONSISTENT WITH LAST YEAR'S LONG RANGE STRATEGIC PLAN OBJECTIVES, AND CURRENT PERFORMANCE PROSPECTS SUBSTANTIALLY EXCEED 1977 BUDGET OBJECTIVES.

CHART XIV

THIS SLIDE SUMMARIZES THE PERIPHERAL PRODUCTS COMPANY'S PRIMARY OBJECTIVES FOR THE LONG RANGE STRATEGIC PLAN. THE PRINCIPAL EMPHASIS IS ON PROFIT IMPROVEMENT AFTER OUR PROBLEMS OF 1975 AND 1976. THIS YEAR WE ARE MAKING GREAT STRIDES IN IMPROVING PROFITS AND ALREADY OUR ROI HAS EXCEEDED THE COST OF MONEY.

WE ARE CONSTRAINING OUR GROWTH IN BUSINESS SEGMENTS THAT DO NOT MEASURE UP TO OUR EXPECTATIONS AND WE WILL ENTER 1978 WITH A VERY CLEAN BALANCE SHEET WITH THE TWO EXCEPTIONS OF WMATA AND AUSTRALIAN OFF-TRACK BETTING.

CHART XV

THE PRIMARY COMPANY STRATEGIES ARE SUMMARIZED ON THIS SLIDE. AFTER A NUMBER OF UPS AND DOWNS IN RECENT YEARS, WE ARE READY TO SHOW CONSISTENT IMPROVEMENTS. IT IS ESSENTIAL THAT WE INCREASE EXPENDITURES IN NEW TECHNOLOGIES SUCH AS BUBBLE MEMORIES. WE ALSO PLAN ON PROMOTING OUR GROWTH ONLY IN COUNTRIES WITH WELL-ESTABLISHED ECONOMIES.
MAJOR CHANGES FROM LAST YEAR'S LONG RANGE STRATEGIC PLAN ARE SHOWN BY GROUP IN THIS SLIDE. PERIPHERALS IS PLANNING ON PLACING GREATER EMPHASIS ON TECHNOLOGIES AND PRODUCTS THAT WILL SUPPLEMENT AND COMPLEMENT OUR VERY SUCCESSFUL ROTATION DISK MEMORIES IN THE EARLY 1980's.

THIS YEAR'S PLAN NOW INCLUDES THE OMEGA SYSTEMS FOR THE PERIPHERAL SYSTEMS GROUP AS A LIMITED PROGRAM THROUGH 1979. WE ARE ALSO WORKING ON EXTENDING OUR MASS STORAGE SYSTEM INTO A BROADER FAMILY OF PRODUCTS AND SYSTEMS TO BETTER MEET THE EMERGING CUSTOMER REQUIREMENTS.

IN DATA SYSTEMS WE ARE NOW PLACING GREAT EMPHASIS IN EVOLVING THE BROAD ARRAY OF PRODUCTS AND SYSTEMS INTO A MORE COHESIVE AND COMPATIBLE PRODUCT FAMILY.

THE CORNERSTONE OF OUR PERIPHERAL SYSTEMS BUSINESS HAS BEEN DISK AND MEMORY PRODUCTS. THEY WILL CONTINUE TO BE EMPHASIZED AS WE FURTHER EXPAND OUR FUTURE BUSINESS WITH UNIQUE SYSTEMS SUCH AS OMEGA, MASS STORAGE AND MEDIUM SPEED NON-IMPACT PRINTER SYSTEMS. WE ARE ALSO EMPHASIZING MID-LIFE ENHANCEMENTS DESIGNED INTO PRODUCTS INITIALLY TO EXTEND THEIR LIFE AND MINIMIZE OBSOLESCENCE.
As mentioned earlier, one of our changes in the plan this year is to extend the mass storage system into a broader family of products and systems. There is also an increasing amount of G-2 that IBM is working on a mini mass storage system.

Chart XVIII

In summary, the strategic plan for peripherals portrays a very good outlook. With only modest revenue growth, net profit before tax is increasing by a factor of 6 and net profit margins are increasing almost 4 times. Return on investment is planned to double over the 5 years. This is being achieved through the improved operating margins and good balance sheet management.

Finally, each of the major business segments are being managed to achieve acceptable ROI’s and profit performance across the segments is becoming much more balanced.

Services

Moving from peripherals to services, I will again update what I said last year. In services we find a quite different basic strategy. Our principal area of strategic emphasis for growth is services. This chart demonstrates that very well, but just considering our historic base of systems, services and peripheral products you can see that we have passed the cross-over in revenue volume so that today, services is our largest, fastest growing business segment.
PSD’s business for 1978 has been segmented into six strategic planning elements (SPE). Each SPE represents a major, basic strategic orientation for which quantitative objectives have been established. The six major PSD SPE’s and growth assumptions are:

1. CDC Systems (EDP) - Related Business. An average of $32.5K PSD revenue for each computer installed - growth rate 9.8%.

2. Cybernet - Related Business. PSD revenues ≈ 5% of Cybernet revenues - growth rate 10.5%.

3. Data Systems - Related Business. An average of $5K PSD revenue for each system installed - growth rate 63%.

4. Non-CDC Systems - Related (IBM, DEC, Siemens, etc.) Business. Follow continued growth of industry - 10%.

5. Stand-alone Services. Continued success with large government and commercial contracts - growth rate 12%.

6. PSD Firms. Expansion of present nine firms and addition of two more - growth rate 13%.

1. SYNTONIC INTRODUCTION INTO OEM MAINTENANCE.
2. ACCELERATION OF MASS STORAGE AND OMEGA PROGRAMS.
3. COMMA EXPANSION INTO 370 MAINTENANCE.
4. SYNTONIC PILOT CITY PROGRAM.
5. CONTINUED RAPID GROWTH OF END USER.
6. FULL IMPLEMENTATION OF OPTICS (INVENTORY CONTROL SYSTEM) IN THE UNITED STATES AND COMPLETE DEVELOPMENT OF FILS - FOR INTERNATIONAL INVENTORIES.

IN SUMMARY, THE ENGINEERING SERVICES PLAN CALLS FOR CONSERVATIVE REVENUE GROWTH WITH AGGRESSIVE COST REDUCTION AND MINIMAL ASSET GROWTH.
DATA SERVICES

DATA SERVICES IS THE KEY ELEMENT OF CONTROL DATA'S BUSINESS STRATEGY. DATA SERVICES IS DIVIDED INTO THREE MAJOR SEGMENTS: CYBERNET OR NETWORK SERVICES, APPLICATION SERVICES AND THE SERVICE BUREAU COMPANY.

NETWORK SERVICES OFFERS A COMMON SET OF SCIENTIFICALLY ORIENTED DATA SERVICES TO USERS WORLDWIDE, AS WELL AS MORE COMMERCIALLY ORIENTED DATA SERVICES OUTSIDE THE UNITED STATES.

CHART XXI

NETWORK SERVICES COMPOUND GROWTH RATE OVER THE PLAN PERIOD IS EXPECTED TO BE J. STRONG EMPHASIS IS PLACED ON APPLICATION REVENUE GROWTH IN TARGETED INDUSTRIES AND/OR DISCIPLINES WITH THE AREAS OF STRENGTH BEING:

1. STRUCTURAL ENGINEERING
2. ELECTRICAL ENGINEERING
3. ENERGY AND FULL MANAGEMENT
4. FINANCIAL PLANNING SERVICES

CUSTOMERS ARE LARGELY COMPANIES IN THE CAPITAL GOODS INDUSTRY, UTILITIES, GOVERNMENT AND CONSULTING FIRMS WHICH REQUIRE COMPUTER PROCESSING TO AID THEIR ENGINEERING FUNCTIONS.
NETWORK SERVICES MOST SERIOUS WEAKNESS IS THE SMALL DEGREE OF PRODUCT DISTINCTION COUPLED WITH THE CONCENTRATION OF OUR REVENUES IN A FEW MAJOR CUSTOMERS. IT IS THIS WEAKNESS WHICH THE APPLICATION STRATEGY ADDRESSES. I’LL SAY MORE ABOUT THAT IN A MOMENT.

CDC’S LEADERSHIP OF THE SCIENTIFIC BATCH AND INTERACTIVE MARKETS IS CONSTANTLY BEING CHALLENGED AND REQUIRES CONTINUED INVESTMENTS IN HARDWARE, NETWORKING CAPABILITY AND APPLICATION SOFTWARE. IN GENERAL, COMPETITION IS WELL FINANCED AND HAS A PROPENSITY TO USE PRICING AS A PRIMARY STRATEGIC TOOL, WHICH REINFORCES THE NEED FOR PRODUCT AND SERVICE DISTINCTION.

OFFSETTING THE THRUST OF COMPETITION IS CDC’S MARKET LEADERSHIP IN SCIENTIFIC DATA PROCESSING. THIS IS REFLECTED IN CDC COMPUTERS, A REPUTATION FOR QUALITY SUPPORT AND THE LONG TERM TOTAL COMMITMENT TO DATA SERVICES.

APPLICATION SERVICES IS A BUSINESS SEGMENT WHICH SERVES UNIQUE REQUIREMENTS WITHIN A PARTICULAR INDUSTRY AND CONSISTS OF ARBITRON, COMPU/NET, SYSTEMS RESOURCES AND TICKETRON.

CHART XXII

APPLICATION SERVICES REVENUES REFLECTS A MUCH HIGHER RATE OF GROWTH AND ARE EXPECTED TO BE IN EXCESS OF 17%.
ARBITRON PROVIDES AUDIENCE MEASUREMENT SERVICES TO RADIO AND TELEVISION BROADCASTERS, ADVERTISERS AND THEIR AGENCIES.

COMPu/NET PROVIDES ADMINISTRATIVE SERVICES TO BROADCASTERS.

PRIMARY OBJECTIVES OF ARBITRON AND COMPu/NET FOR THE PLAN ARE:

- EXPAND AND CREATE ADDITIONAL SOURCES OF REVENUE IN RELATED MARKETS.

- IMPROVE PROFITABILITY IN ALL BUSINESS SEGMENTS AND PARTICULARLY COMPu/NET AND ARBITRON TELEVISION.

- SECURE A LESS EXPENSIVE METERING SYSTEM IN ORDER TO EXPAND INTO OTHER MAJOR CITIES.

SYSTEM RESOURCES, INC. PROVIDES MEMBERSHIP AND CLAIMS PROCESSING SERVICES TO HEALTH INSURANCE CARRIERS. AN ACQUISITION WAS RECENTLY MADE WHICH WILL OFFER AN ON-LINE MEMBERSHIP SYSTEM AND AN ON-LINE CLAIMS PROCESSING SYSTEM IS CURRENTLY UNDER DEVELOPMENT.

TICKETRON OFFERS TWO MAJOR SERVICES.
SPORTS AND ENTERTAINMENT DISTRIBUTES TICKETS TO SPECTATOR EVENTS WITHIN THE CONSUMER MARKET THROUGH A NETWORK AND ON A STAND ALONE BASIS THROUGH AN ARENA SYSTEM.

MAJOR THRUSTS DURING THE PLAN PERIOD WILL BE TOWARD EXPANDING INSTALLATIONS OF THE TICKETRON 2000 SYSTEM WHICH IS A STAND ALONE SYSTEM, AND DIVERSIFYING THE TICKET REVENUE BASE THROUGH GEOGRAPHIC AND EVENT/INDUSTRY EXPANSION. IN ADDITION, PRELIMINARY PLANNING TO ENTER INTERNATIONAL MARKETS IS UNDER CONSIDERATION.

THE AUTOMATED WAGERING DIVISION OF TICKETRON OFFERS SERVICES TO LEGALIZED WAGERING OPERATIONS SUCH AS OFF-TRACK BETTING AND STATE LOTTERY SYSTEMS.

SERVICE BUREAU COMPANY OFFERS BATCH AND NETWORK ORIENTED DATA SERVICES PRIMARILY TO THE FINANCE, MANUFACTURING AND DISTRIBUTION INDUSTRIES. EMPHASIS IS PRIMARILY ON "COMMERCIAL APPLICATIONS" WITHIN THESE INDUSTRIES.

CHART XXIII

THE COMPOUND GROWTH RATE FOR THE SERVICE BUREAU COMPANY IS EXPECTED TO BE 13.7%.
NETWORK ORIENTED PRODUCTION MODES OFFER THE BEST OPPORTUNITIES FOR THE FUTURE AND, CONSEQUENTLY, THE CURRENT MIX OF BUSINESS WILL SHIFT TOWARD ON-LINE SERVICES, REMOTE BATCH ENTRY AND REMOTE BATCH PROCESSING.

CHART XXIV

THE FOLLOWING TABLE SUMMARIZES THE BUSINESS UNITS, SERVICE OFFERINGS AND GEOGRAPHIC RESPONSIBILITIES WITHIN THE SBC GROUP.

CHART XXV

IN SUMMARY, THE FINANCIAL OBJECTIVES OF DATA SERVICES ARE:

1. TO GROW REVENUE AT A COMPOUND GROWTH RATE OF APPROXIMATELY 14%.

2. ACHIEVE PROFITABLE OPERATIONS ACROSS ALL OPERATING UNITS AND GEOGRAPHIES.

THE MAJOR STRATEGIES IMPLICIT IN THE LONG RANGE PLAN TO ACHIEVE THESE OBJECTIVES ARE AS follows:

CHART XXVI

- APPLICATIONS UNIQUENESS/DATA BASE
- DATA SERVICES AND MINI COMPUTERS
- INDUSTRY DISCIPLINE SPECIALIZATION
APPLICATION UNIQUENESS IS THE KEystone OF DATA SERVICES STRATEGY. "APPLICATION UNIQUENESS", HOWEVER, IS A BROAD TERM. ONE OF THE THINGS THAT IT COVERS IS THE WHOLE AREA OF DATA BASES AND DATA BASE MANAGEMENT TOOLS. FOR EXAMPLE, THE PROPRIETARY DATA BASES OF ARBITRON IS THE ESSENCE OF THE WHOLE BUSINESS. THE DATA BASE MANAGEMENT SOFTWARE OF CALL 370'S MINI-MIS OFFERING IS THE ESSENCE OF THAT APPLICATION PRODUCT. TICKETRON DEALS ENTIRELY WITH A DATA BASE. AND SO ON. SO APPLICATION UNIQUENESS IMPLIES, NOT JUST COMPUTATION SOFTWARE UNIQUE TO US, OR UNIQUE DELIVERY MECHANICS SUCH AS GRAPHICAL DISPLAY, BUT AN EVER INCREASING EMPHASIS ON DATA BASES AND DATA BASE MANAGEMENT SOFTWARE. IT APPLIES EQUALLY TO SCIENTIFIC APPLICATIONS -- PLASTICS, SOLAR ENERGY, TECHNOLOGY, AS WELL AS COMMERCIAL AND FINANCIAL -- SECURITIES, ECONOMIC DATA, SAVINGS AND LOAN STATISTICS, ETC.

I CAN'T REALLY COVER THIS WHOLE SUBJECT IN A FEW MINUTES THIS MORNING, BUT JUST REMEMBER, PROPRIETARY DATA BASES, PUBLIC DATA BASES, PRIVATE DATA BASES, NEW DATA BASE MANAGEMENT SOFTWARE, TECHNOTEC, ARBITRON, CALL 370, GRAPHICS STRUCTURES, STRUCTURAL
ENGINEERING AND ASSOCIATED DATA BASES, FINANCIAL PLANNING AND MODELING. ALL THOSE THINGS ARE PART AND PARCEL OF WHAT WE'RE TALKING ABOUT IN THE BASIC THRUST OF DATA SERVICES BEING DATA BASES.

A SECOND KEY ELEMENT OF DATA SERVICES STRATEGY IS MINI-COMPUTERS. WE HAVE HAD A FEW BEGINNINGS OF COMBINED DATA SERVICES AND SMALL COMPUTERS: TICKETRON (T-2000), ARBITRON/COMPUNET (TV SYSTEM) BUT MOSTLY WE HAVE HAD TALK. IN 1978 WE WILL BEGIN MUCH MORE AGGRESSIVELY TO LOOK AT STRATEGIES INVOLVING SMALL SYSTEMS AND DATA SERVICES AS PART OF A TOTAL APPLICATION OFFERING.

IN ADDITION TO THESE TWO PRINCIPAL STRATEGIC ELEMENTS FOR DATA SERVICES, THERE ARE FOUR OTHERS WHICH SHOULD BE MENTIONED.

1. INDUSTRY AND DISCIPLINE SPECIALIZATION AS A MEANS OF DEVELOPING AND MAINTAINING EXPERTISE IN OUR SELECTED MARKETS TO BETTER SERVE CUSTOMERS.

2. MARKETING EXPANSION TO ACHIEVE AN ACCELERATED RATE OF GROWTH AND INSURE THAT FULL ADVANTAGE IS REALIZED FROM INVESTMENT IN APPLICATIONS AND OUR WORLD-WIDE DELIVERY SYSTEM.
3. **RELIABILITY AND AVAILABILITY IMPROVEMENT IN GETTING THE BENEFITS OF OUR SERVICE DELIVERED TO OUR CUSTOMERS.** LEADERSHIP IN THIS AREA IS THE FUNDAMENTAL REQUISITE TO ANY SERVICE BUSINESS IN ACHIEVING COMPETITIVE ADVANTAGE AND UNIQUENESS.

4. **PRODUCTIVITY AND EFFICIENCY INCREASE IS TO BE PURSUED IN EVERY FACET OF THE BUSINESS.** SALES, ADMINISTRATION AND OPERATIONS PERFORMANCE RATIOS WILL BE MONITORED AND INCREASINGLY CHALLENGING GOALS WILL BE ASSIGNED.

**CHART XXVII  SUMMARY**

THIS FINAL CHART THEN SHOWS WHAT IT ALL ADDS UP TO IN REVENUE AND PROFITS FOR THE THREE BUSINESSES. IT REFLECTS THE EVER INCREASING CONTRIBUTION OF SERVICES IN BOTH REVENUE AND PROFITS.

WE ARE MAKING PROGRESS. THE PLAN IS BALANCED BETWEEN IMPROVING WHAT WE HAVE AND DOING MORE AS WELL. THE PLAN CALLS FOR STRETCH AND IT IS CLEAR THAT IT IS POSSIBLE. WHETHER WE ACHIEVE IT OR NOT IS ANOTHER MATTER. THE IMPORTANT THING TO REMEMBER -- THAT I'VE ASKED PEOPLE TO REMEMBER IS THAT A PLAN IS NOT TOMORROW -- IT STARTS TODAY. OVERHEAD REDUCTION, ORDERS, SCHEDULED PRODUCT RELEASES, IMPROVED PROFIT PROJECTIONS. IF WE START TO STRETCH NOW, THE REST WILL COME A LOT EASIER. ACCORDINGLY, THE 1978 BUDGET GUIDELINES AND COMMITMENTS HAVE BEEN SET ABOVE THE LEVELS
CONTAINED IN THE STRATEGIC PLAN. 1977 WILL EXCEED BUDGET AND PREVIOUS STRATEGIC PLAN. 1978 BUDGETS, TO REPEAT MYSELF, WILL BE SET HIGHER THAN THIS STRATEGIC PLAN. 1978 ACTUALS REMAIN TO BE SEEN. IT IS MOSTLY A MATTER OF PERFORMANCE. AS WE STRIVE FOR STRETCH IN PERFORMANCE, WE ARE EXPOSED TO MORE RISK IN ACTUALLY ACHIEVING THE TARGETS.

I HAVE ASKED EACH EXECUTIVE TO GIVE YOU SOME PERSPECTIVE ON WHAT HE PERCEIVES HIS MAJOR EXPOSURES TO BE IN 1978. MOREOVER IN THIS RAPIDLY CHANGING BUSINESS INVESTMENT IN THE FUTURE IS ALWAYS REQUIRED -- THE BALANCE IS THE KEY AS I MENTIONED A MOMENT AGO. SO THEY WILL HAVE A FEW WORDS ON THAT AS WELL.

1978 AND THE YEARS BEYOND ARE A GREAT CHALLENGE. IF WE CAN CONTINUE ON THE PATH OF THE PAST FEW YEARS, I'M SURE THAT CHALLENGE WILL BE MET.
AGENDA FOR MEETING
OF THE BOARD OF DIRECTORS OF
CONTROL DATA CORPORATION

Friday, November 11, 1977 -- 8:00 A.M.
8100 34th Avenue South -- Tower Building
Minneapolis, Minnesota  55440

1. / Executive Session to Elect New Directors

2. / Approval of Prior Minutes
   Board of Directors  9/16/77
   Retirement Committee  9/14/77
   Audit Committee  9/15/77
   R. B. Hawkins  (5)

3. / Consolidated Financial Summary  G. E. Polaczyk  (10)

4. / Chairman's Comments  W. C. Norris  (25)

5. / Computer Business Long Range
   Strategic Plan  R. M. Price  (120)

6. / Commercial Trading International  C. J. Knorr  (15)

7. / CCC Investment Banking Managers  C. W. Brooks  (15)

8. / Gulf Insurance  J. D. Minutilli  (15)

9. / Declaration of Preferred
   Stock Dividend  R. B. Hawkins  (5)

10. / Authority to Vote Stock of
    Subsidiaries  R. B. Hawkins  (5)

11. / Amendment of EPARP Plan  R. B. Hawkins  (15)

12. / Secretarial Matters:
    Amendment of Autocon Retirement Plan  R. B. Hawkins  (20)
    Amendment of Retirement for ERISA Compliance
    Amendment of Old Retirement Plan

13. Other Business

14. Executive Session
### 1978-1982 LONG RANGE STRATEGIC PLAN

**BALANCE SHEET SUMMARY**

**COMPUTER GROUP**

($ MILLIONS)

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### Notes

- The balance sheet summary presents the forecasted values for assets, liabilities, and equity over the period 1976 to 1982.
- The data is categorized under various headings such as Assets, Liabilities, and Equity.
- The strategic plan is depicted graphically with trends illustrating the forecasted values.
1978 - 1982 LONG RANGE STRATEGIC PLAN
GROWTH HIGHLIGHTS
COMPUTER GROUP

REV. GROWTH % 13.6 4.6 11.5 11.8 10.2 9.4

REVENUE

NPBT

ASSETS/REV.

ASSET ADDITIONS

CASH FLOW

REV. GROWTH %

NPBT

ASSETS/REV.

ASSET ADDITIONS

CASH FLOW
1978-1982 LONG RANGE STRATEGIC PLAN
REVENUE AND TECHNICAL EFFORT SUMMARY
COMPUTER GROUP

($ MILLIONS)

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STRATEGIC PLAN
### TOTAL TECHNICAL EFFORT

#### COMPUTER GROUP

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/kwa10
11/9/77
1978-1982 LONG RANGE STRATEGIC PLAN
KEY PERFORMANCE INDICATORS
COMPUTER GROUP

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SYSTEMS
LONG RANGE STRATEGIC PLAN

PRODUCT FAMILIES

- EDP SYSTEMS
- AEROSPACE
- INSTRUMENTS AND CONTROLS
EDP SYSTEMS
LONG RANGE STRATEGIC PLAN

GEOGRAPHIES

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EDP SYSTEMS
LONG RANGE STRATEGIC PLAN

PRIMARY STRATEGIC FACTORS

- EDP REVENUE SHIFT - SOFTWARE 30% BY 1982
- MIGRATION OF CYBER 170
AEROSPACE
LONG RANGE STRATEGIC PLAN

- A TURNAROUND SITUATION

- SOME PROGRESS - 1978 IS KEY
INSTRUMENTS AND CONTROLS
LONG RANGE STRATEGIC PLAN

0 STANDARDIZATION OF SOFTWARE AND HARDWARE TO ALLOW LESS EXPENSIVE IMPLEMENTATION OF MAJOR POWER NETWORK CONTROL PROJECTS

0 BECOMING MORE SELF SUFFICIENT IN PROVIDING APPLICATIONS SOFTWARE

0 DEVELOP NEW APPLICATIONS TO BROADEN PRODUCT OFFERINGS

0 DEVELOPMENT OF INTERNATIONAL MARKETS THROUGH DIRECT SALES AND COOPERATIVE AGREEMENTS
PERIPHERAL PRODUCTS COMPANY
LONG RANGE STRATEGIC PLAN

PRODUCT FAMILIES

- OEM
- PERIPHERAL SYSTEMS
- DATA SYSTEMS
- BUSINESS PRODUCTS
PERIPHERAL PRODUCTS COMPANY
LONG RANGE STRATEGIC PLAN

PRIMARY OBJECTIVES

- Establish financial performance goals that are improved over last year’s long range plan and that meet the performance requirements of the corporation.
- Principal emphasis is on profit improvement and the establishment of an earnings base that will result in acceptable returns on capital employed.
  - Achieve ROI levels in excess of the “cost of money” in 78-79 timeframe
  - Approach ROI levels in the 15-20% range in the early 80’s timeframe
- Continue to efficiently utilize assets and constrain new investments to achieve improved balance sheet performance.
- Constrain growth in business segments and product lines that are not presently profitable except for long-term market opportunities such as mass file and medical systems.
- Enter 1978 with strong balance sheet.
PERIPHERAL PRODUCTS COMPANY
LONG RANGE STRATEGIC PLAN

PRIMARY COMPANY STRATEGIES

- Continue emphasis on net profit and ROI improvements through planned revenue growth and optimized resource deployment.

- Develop products and expand technology in our major market areas and expand support for our systems, services and education groups.

- Primary business concentration and expansion will be in the United States and specific Western European countries such as Germany, France and Scandinavia.

- Define the strategies and the implementation plan required to penetrate the sophisticated miniperipheral end user market.

- Concentrate on standard products and product modules for both internal and external use. Avoid "specials" except to capitalize on significant volume and profit opportunities.

- Utilize computer based education (CBE) to assist the company and division management as well as the other employees to become more effective in carrying out their defined objectives and responsibilities.
PERIPHERAL PRODUCTS COMPANY

MAJOR STRATEGY CHANGES FROM
1977 -- 1981 LONG RANGE STRATEGIC PLAN

OEM GROUP

- GREATER EMPHASIS ON A MORE BALANCED OEM PRODUCT PROFILE
- GREATER EMPHASIS ON TECHNOLOGIES AND PRODUCT AREAS SUPPLEMENTING AND COMPLEMENTARY TO THE ROTATING DISK MEMORIES
- EMPHASIS ON PENETRATING THE SOPHISTICATED END USER MINI-PERIPHERAL MARKET

PERIPHERAL SYSTEMS GROUP

- ADDITION OF THE OMEGA SYSTEMS AS A LIMITED OFFERING IN THE IBM EMULATOR MARKET
- FURTHER EMPHASIS ON EXTENDING THE MASS STORAGE SYSTEM INTO A BROADER FAMILY OF PRODUCTS AND SYSTEMS

DATA SYSTEMS GROUP

- EMPHASIS ON EVOLVING THE DATA SYSTEMS PRODUCTS INTO A COHESIVE AND COMPATIBLE PRODUCT AND SYSTEM FAMILY
- ADDITIONAL EMPHASIS ON APPLICATION SOFTWARE TO SUPPORT SPECIFIC INDUSTRIES RATHER THAN THE DEVELOPMENT OF COMPETITIVE STATE-OF-THE-ART PROCESSORS

BUSINESS PRODUCTS GROUP

- FURTHER EMPHASIS ON INVESTIGATING ALTERNATIVE USES OF THE FORMS MARKETING RESOURCES
- ADDITIONAL EMPHASIS ON EXPLOITING THE FUTURE GROWTH OF FLEXIBLE MEDIA
PERIPHERAL PRODUCTS COMPANY
LONG RANGE STRATEGIC PLAN
ANALYSIS OF PLAN

- Revenue growth is modest and averages approximately 10%
- Net profit before tax -- 6 times improvement by 1982
- Net profit margins -- 3.6 times improvement by 1982
- Return on investment -- 2.3 times improvement by 1982
- Profit performance will become more balanced between the four major business segments
PROFESSIONAL SERVICES
LONG RANGE STRATEGIC PLAN

0 CDC SYSTEMS (EDP) - 9.8% GROWTH

0 CYBERNET - RELATED BUSINESS - 10.5% GROWTH

0 DATA SYSTEMS - RELATED BUSINESS - 63% GROWTH

0 NON CDC SYSTEMS - RELATED (IBM, DEC, SIEMENS, ETC.) BUSINESS - 10% GROWTH

0 STAND-ALONE SERVICES - 12% GROWTH

0 PSD FIRMS - 13% GROWTH
ENGINEERING SERVICES
LONG RANGE STRATEGIC PLAN

- SYNTONIC INTRODUCTION INTO OEM MAINTENANCE
- ACCELERATION OF MASS STORAGE AND OMEGA PROGRAMS
- COMMA EXPANSION INTO 370 MAINTENANCE
- SYNTONIC PILOT CITY PROGRAM
- CONTINUED RAPID GROWTH OF END USER
- FULL IMPLEMENTATION OF INVENTORY CONTROL SYSTEMS (OPTICS INVENTORY CONTROL SYSTEM IN THE UNITED STATES AND COMPLETE DEVELOPMENT OF FILS - FOR INTERNATIONAL INVENTORIES)
LONG RANGE STRATEGIC PLAN

NETWORK SERVICES

Revenue
Growth
Rate 10.9

Net Profit

<table>
<thead>
<tr>
<th>Year</th>
<th>1977 Forecast</th>
<th>PLAN PERIOD GROWTH RATE</th>
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<tbody>
<tr>
<td>U.S. CYBERNET</td>
<td>51.7</td>
<td>10.5%</td>
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<tr>
<td>WEST EUROPE</td>
<td>32.3</td>
<td>11.8%</td>
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<tr>
<td>PAN AM</td>
<td>10.6</td>
<td>17.5%</td>
</tr>
<tr>
<td>OTHER</td>
<td>3.8</td>
<td>24.9%</td>
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</table>
LONG RANGE STRATEGIC PLAN
APPLICATION SERVICES

1977 FORECAST | PLAN PERIOD GROWTH RATE

| TICKETRON | 18.2 | 20.0% |
| ARB       | 27.5 | 10.1% |
| SRI       | 1.8  | 164.0% |
| COMPU/NET | 1.0  | 28.5% |

Revenue Growth Rate 17%
LONG RANGE STRATEGIC PLAN

SERVICE BUREAU

Revenue Growth Rate 13.7%

Net Profit

DATA SERVICES

LONG RANGE STRATEGIC PLAN

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>77 FORECAST</th>
<th>GROWTH</th>
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<tbody>
<tr>
<td>ACTION DATA SERVICES</td>
<td>8.1</td>
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<tr>
<td>BROKERAGE TRANSACTION SYSTEMS, INC.</td>
<td>5.4</td>
<td>12.0%</td>
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<tr>
<td>DATA PROCESSING SERVICES</td>
<td>57.8</td>
<td>8.2%</td>
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<tr>
<td>G.B.S.</td>
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<tr>
<td>CREDIT SERVICES</td>
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<td>AUTOMOTIVE SERVICES</td>
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<tr>
<td>CUSTOM</td>
<td></td>
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<tr>
<td>TIME SHARING SERVICES</td>
<td>66.2</td>
<td>16.1%</td>
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<tr>
<td>CALL/370</td>
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<tr>
<td>CALL/PLUS</td>
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<td>CDC INTERNAL AND INTERNATIONAL RESALE</td>
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<tr>
<td>DATA SERVICES FAR EAST</td>
<td>0.1</td>
<td>210.0%</td>
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<tr>
<td>NEW BUSINESS PROGRAMS</td>
<td>2.6</td>
<td>145.0%</td>
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<td>MANUFACTURING</td>
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<td>IMICS</td>
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<td>RANKING DATA SERVICES</td>
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<tr>
<td>EFT SUPPORT TO CCC</td>
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</table>

/LEH10
LONG RANGE STRATEGIC PLAN

DATA SERVICES

Revenue Growth Rate 13.8

Net Profit

DATA SERVICES
LONG RANGE STRATEGIC PLAN

MAJOR STRATEGIC ELEMENTS

- APPLICATIONS UNIQUENESS/DATA BASES
- DATA SERVICES AND MINI COMPUTERS
- INDUSTRY DISCIPLINE SPECIALIZATION
- MARKETING EXPANSION
- RELIABILITY AND AVAILABILITY IMPROVEMENT
- PRODUCTIVITY AND EFFICIENCY INCREASE
1978-1982 LONG RANGE STRATEGIC PLAN
BUSINESS MIX CHANGE
COMPUTER GROUP

REVENUE:

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<tr>
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<tbody>
<tr>
<td>SYSTEMS</td>
<td>431</td>
<td>410</td>
<td>443</td>
<td>491</td>
<td>547</td>
<td>592</td>
<td>635</td>
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<tr>
<td>SERVICES</td>
<td>469</td>
<td>545</td>
<td>576</td>
<td>638</td>
<td>721</td>
<td>806</td>
<td>900</td>
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<tr>
<td>PER. PROD.</td>
<td>409</td>
<td>532</td>
<td>536</td>
<td>605</td>
<td>670</td>
<td>738</td>
<td>801</td>
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<tr>
<td>TOTAL</td>
<td>1309</td>
<td>1487</td>
<td>1555</td>
<td>1734</td>
<td>1938</td>
<td>2136</td>
<td>2336</td>
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N.P.B.T.:

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<tbody>
<tr>
<td>SYSTEMS</td>
<td>3.3</td>
<td>14.0</td>
<td>25.5</td>
<td>38.9</td>
<td>55.4</td>
<td>64.3</td>
<td>76.6</td>
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<tr>
<td>SERVICES</td>
<td>21.2</td>
<td>28.9</td>
<td>31.8</td>
<td>37.6</td>
<td>56.9</td>
<td>80.5</td>
<td>94.1</td>
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<td>PER. PROD.</td>
<td>1.2</td>
<td>14.0</td>
<td>20.3</td>
<td>36.2</td>
<td>50.1</td>
<td>67.9</td>
<td>79.0</td>
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<tr>
<td>S&amp;S ADM.</td>
<td>(0.3)</td>
<td>(1.4)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>25.4</td>
<td>55.5</td>
<td>77.6</td>
<td>112.6</td>
<td>162.5</td>
<td>212.7</td>
<td>249.7</td>
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1978-1979 LONG RANGE STRATEGIC PLAN
COMPARISON OF CURRENT LRSP TO PRIOR LRSP
COMPUTER GROUP

($ MILLIONS)

<table>
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<tr>
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<th>FCST/PLAN</th>
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<tr>
<td></td>
<td>1977</td>
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<td>REVENUE</td>
<td>1487</td>
<td>1555</td>
<td>1734</td>
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<tr>
<td>NPBT</td>
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<td>112.6</td>
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<td>ASSETS</td>
<td>1247</td>
<td>1303</td>
<td>1329</td>
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<tr>
<td>CASH FLOW</td>
<td>0.4</td>
<td>(20.6)</td>
<td>25.7</td>
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PERIPHERAL SYSTEMS
STRATEGY AND ASSUMPTIONS SUMMARY

STRATEGIES

* MAINTAIN REVENUE AND PROFIT GROWTH FROM DISK AND MEMORY PRODUCTS -- FURTHER EXPAND BUSINESS WITH UNIQUE SYSTEMS SUCH AS OMEGA, MASS STORAGE AND MEDIUM SPEED NIP SYSTEMS

* EMPHASIZE MID-LIFE ENHANCEMENTS TO EXTEND PRODUCT LIFE AND MINIMIZE OBsolescence

* EXTEND MASS STORAGE SYSTEM INTO A BROADER FAMILY OF PRODUCTS AND SYSTEMS

* EMPHASIZE FIELD RELIABILITY AND ENHANCEMENT OF MAINTENANCE AND FIELD SUPPORT CAPABILITIES

* EXPLOIT OMEGA 480 SYSTEMS AS A LIMITED MARKET OPPORTUNITY -- ANALYZE POTENTIAL FOR FOLLOW-ON PROGRAM

ASSUMPTIONS

* IBM WILL NOT BE BROKEN UP INTO SEPARATE COMPANIES

* LEASE BASE WILL BE FINANCED MORE AGGRESSIVELY THROUGH CCC