I. INTRODUCTION

Good evening. Being with you folks of the Normandale Management Club is a special occasion. It's always a pleasure for me to be with Control Data management people but it's a special pleasure to be with those who are responding to a particularly tough challenge. And that's certainly what you have had for the last year or so. This time last year our disk business was in kind of "free fall" with backlog vanishing and new orders hard to come by. On top of that we were painfully awake to the fact that technology leadership was slipping away from us. But tonight as we meet you -- and I -- have the satisfaction of having shipped the first thin film head disk system outside IBM. What a change!

The 33800 subsystem is just one of several new products to be introduced to the marketplace during 1983. Your dedication to improving the technical and quality leadership of our products is an outstanding example of teamwork and innovation.
The technology advances that you are making in thin film heads, plated media, vertical magnetic recording and LSI technology are important to our long-term competitiveness in the marketplace. Although we may have slipped slightly during 1980 and 1981, your ability to respond to the challenge is one of the reasons that I look forward to a bright future for the Peripheral Products Company.

All of you deserve to be congratulated -- it's great to have you on my team.

II COMPANY STATUS

Let me start with a discussion of how "the team" is doing. As you are no doubt well aware, 1982 was the first time in seven years we didn't improve our financial results. Total revenue, including Commercial Credit, increased five percent to $4.3 billion -- but earnings went down. Earnings per share were $4.11 compared to $4.48 in 1981 -- a drop of eight percent. The parts of the business hardest hit were OEM Peripherals, Insurance Services, and the CALL 370 and structural analysis parts of Data Services. The largest growth rates occurred in Small Business Services (60%), Ticketron (47%), and Government Systems (30%). The best overall improvement in terms of profit rate was registered by
Arbitron -- with Government Systems and Engineering Services not far behind -- and the most profitable units were: Arbitron 139%, Ticketron 46%, Professional Services 44%, and CDI 23%. So even in a not so good year, there were success stories aplenty.

III. PEOPLE

More important to me, however, than the numbers, is the progress we made last year in the three basic components of operational effectiveness: people, process, and capital. I'll take people first.

The basic strategy with regard to the productivity and effectiveness of Control Data's people is embodied in the strategy set forth two years ago called Fair Exchange. The basic premise is simple: if people believe they're working in an environment of relative job security, if they experience a sense of justice and fairness in the way they're treated, if they feel that what they think and do matters, and if they have an opportunity to acquire necessary skills, they'll make the commitment -- and have the ability -- to become more productive. All of those concepts are embodied in the five basic principles of Fair Exchange, which are:
o A policy which provides an increasing level of job security for the greatest number of its employees.

o Management practices that ensure fair and just treatment of all employees.

o Management practices that place a high value on reward for performance.

o Corporate benefits and support services which recognize that personal quality of life affects performance on the job.

o And an environment for continued self-growth and achievement which goes beyond the training experience required for an employee's present position.

Now, whether an employee believes we're really doing these things depends -- not on corporate pronouncements -- it depends first and foremost on what he or she experiences day in and day out at the local work site. It doesn't matter what we say -- in fact, there's an unusual downside risk in saying these things at all -- if an employee sees a significant discrepancy between what top management might say and what he or she actually experiences on the job. Nothing is worse -- and nothing destroys morale any quicker -- than the obvious hypocrisy when local actions fail to live up to promises.
So the key must be improved management development. From the moment you prepare to become a manager, you need to learn what those principles mean in terms of conditions and events in the areas you supervise.

Building on existing management development programs, we have made considerable progress in that regard. We've refined and added to our core curriculum for managers by integrating both the basic business skills of finance, accounting, budgeting, decision making, etc., with the skills needed to manage people.

In line with these five principles, there's a peculiar twist in all this, however. Because so much progress has been made in the last year or two -- and in fact will be made this year and next -- new managers will be better prepared to implement Fair Exchange than will those who received most of their management training as recently as three or four years ago. This means for almost all of you there is a great necessity for refresher courses and additional training.

But education isn't enough. The whole concept has to be consciously introduced into everyday work life -- and in 1982 we developed a process to help make that happen.
It's basically a team development exercise which ultimately arrives at a plan for implementing Fair Exchange in a specific organization. The exercise integrates organizational goal setting with the effects of external societal factors on the particular organization -- and studies ways in which tools such as Process Flow Analysis, skills training, involvement teams, asset management, and so on, can be used to develop a comprehensive strategy for that particular organization.

Engineering Services was already 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 they've achieved during the last year have been truly impressive: One entire layer of management has been removed. Assets employed per dollar of revenue have been reduced from 55 cents to 54. Pre-tax return on revenue improved 2.2 percent in 1982 and this year will improve another 1.4 percent. What this means is in two years, Engineering Services' pre-tax margins will have improved by more than one-third. And all that is happening at a time when maintenance charges on new computers are 25 to 50 percent less than those on the predecessor product line.

(Caldwell Racoon Story)
Let me move now to some of the other aspects of Fair Exchange. One of the five principles I noted, is to provide an increasing level of job security for the greatest number of employees. We're doing that by providing buffers -- we call them the inner and outer rings of defense -- and they've already played a major role in protecting our full-time employees.

The need to depend on the people buffers represented by outside contract work and supplemental employees came at us in 1981-1982 before our policies were fully implemented. Nevertheless, those rings of defense prevented the forced layoff of some 2,000 people -- half of those in the Peripheral Products Company -- we've managed to keep forced layoffs to less than 1.5 percent of full-time employees even though total employment is down some 4,000 people. I know you're familiar with most of the steps we've taken to achieve that -- programs like time off without pay, S.W.A.T. teams, plant closings around the holidays, four-day 32-hour weeks, and others. All have been helpful.

But long-term job security depends on how well we rebuild the "outer" rings of defense. What this means is that generally we'll replace attrition with subcontractors and supplemental workers rather than full-time employees. PPCo, like other Control Data organizations, has an objective to rebuild its
rings of defense. Peripheral Products, under the leadership of Jim Stathopoulos and Dick Berreth, and in cooperation with the Systems organization, is developing a plan to build a 30% people buffer for PPCo. This means, for example, that the MPI organization would have 30% of its required headcount satisfied by supplemental employees and subcontractors. As our business rebounds in 1983 and 1984, it is important that we work to re-establish these "outer" rings of defense."

(Pause)

With regard to employee equity and justice, another of the five principles, the emphasis has been placed on prevention of problems. Recognizing, however, that some conflicts just can't be resolved locally, several years ago we augmented the basic grievance system by establishing EAR. Now we've taken the process one step further. Whenever a problem cannot be resolved at the first or second level of management, a panel of employees, together with an executive, but under the guidance of an ombudsperson, will review it and make recommendations to top management.

For a number of months last year, we tried the process in three locations and in each one preceded the introduction by putting management through our training courses dealing with conflict. The trial run worked so well -- we didn't need a single panel in any of the locations -- that in 1983 and 1984 we'll put the process in place throughout U.S. operations.
In the interest of time, I won't go into detail about any of the other of the five principles -- except to say that each operating organization has been charged with developing a specific implementation plan for each principle in 1983.

And one more thing, when we first began looking at Fair Exchange, we decided not to establish a separate budget for development costs. We didn't want to take an extraordinary approach -- we wanted to embed the Fair Exchange principles in everything we did -- so we chose instead to redirect existing budgets assigned to our human resources functional staffs. As a consequence, we haven't invested lots of new dollars in Fair Exchange *per se*. Yet, here we are -- ready for a concentrated implementation -- with the flexibility necessary to meet the specific needs of individual organizations rather than pushing an identical corporate-wide program down from the top.

IV. **PROCESS**

The second element in the PPC formula is process. Looking back, it's clear to me that it's been poor process -- as much as anything -- that has kept Control Data from fully capitalizing on its strategic potential. And process -- good process -- depends almost entirely on the creativity and initiative of individual line managers.
We've been working at improving our process in various ways during recent years. The improvement in our financial performance since 1975 reflects that work. But in December 1981, we undertook a more concerted, more comprehensive attack on poor processes -- and we've made remarkable progress in the past year. One important tool is called Process Flow Analysis -- or PFA.

More than 3,600 employees have been trained to use it thus far -- at a cost of only $87,000 -- and their resulting "know-how" has been applied to more than 750 processes.

The results of this are just beginning to be felt -- and already the success stories are impressive. For example:

The OEM organization has reduced its administrative expenses $160,000 by stream-lining its spares order entry system for spares. In addition, to reducing our costs, we are able to provide better service to our customers.

Two other examples in Peripheral Products where PFA is being effectively used is in simplifying our CEA system and our OEM order processing system.
Process flow played a major role in the development of the new PPCo manufacturing system. We started with the existing MICS system and flowed the operational process to eliminate redundancy, inefficiency and complexities. This process lead to a simpler system architecture that can be developed in a modular, evolutionary manner over a number of years. This approach reduces the cost in any one year and allows us to achieve the benefits much quicker. Process flow was key in providing us the visibility we needed to effectively do this.

Those are three small examples. But taken together you can see that the 750 processes already under analysis can add up to a tremendous impact on profits. Certainly no management people in Control Data have a greater opportunity to improve profitability through improved process than do those of you in this room.

While all the PFA training and process improvement activity has been in progress, the process improvement office has been working to improve PFA itself through automation.

In December a year ago, when we kicked off the PFA program, the only mechanical assistance available was some special word processing programs to help with documentation procedures. Training was all stand-up classroom style. Fifteen months later -- by April this year -- PFA PLATO will have been installed in Learning Centers throughout Control Data.
In the beginning, the input to and the output of the PFA method was all paper — the documentation of the process itself, the description of necessary job skills, everything. By mid-second quarter, process documentation for PFA will be possible on the CD-110 and will contain some advanced features such as:

- Full documentation on magnetic disk and maintenance that can be achieved with relative ease via the CD-110 video monitor.

- There will be an automated technique for generating pictorial flow charts from the task inventory narrative of PFA. This, I might add, decreases PFA documentation time by 35 percent.

- There will be 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.

- And finally, there will be a management monitoring matrix that tracks any PFA in-progress activity.

All that has to do with the documentation part of PFA. And remember, PFA is just one tool of many. SQC is yet another powerful technique. And that reminds me that all of this emphasis on process is just another way of saying "quality."
Later this year, a CD-110 expanded PLATO courseware capability will be offered for the analysis phase of PFA.

V. CAPITAL

With regard to the third element of our formula for improved productivity -- capital -- last year we continued to improve on the already good job we've been doing in recent years -- funding the business at a reasonable cost and reducing working capital needs for receivables and inventory. Let me give you a few examples.

The average days outstanding for the electronics industry (as published by the Credit Research Foundation) is 49 days -- seven percent more than last year. At the same time, our days outstanding have improved from 42 last year to the current level of 37. That means we're 24 percent better than the industry average, and the gap is widening.

Another example of our increased effort to speed up the time it takes to convert work performed into cash is what we've done with government contract renewals. In the past, our receivables have increased after the start of the U.S. government's fiscal year October 1. In 1981, for example, by December 31, we had renewed only 33 percent of our government...
contracts. In 1982, through a well-organized program, U.S. Marketing renewed 95 percent of the contracts by the same date -- an improvement of $18 million in cash flow compared to the previous year.

Let me turn to inventory management. As we moved into 1982, it became apparent that the slowdown in business which started in the second half of 1981 would continue, so we took actions to bring inventory back in line with business prospects. Inventory hit a peak in May. By year's end it was down $92 million from that level.

Although it wasn't the only area affected, our major problems were in OEM. Fortunately, we were able to get at them early in the year. OEM inventory reached a high in March of $359 million and ended the year down some 25% from its March high point. MPI played a significant role in this inventory reduction program. In nine months, during 1982, you were able to reduce your inventory by $67M.

VI. CLOSE

In sum, we made a lot of progress last year improving the fundamentals of our business -- with regard to people, in process, and in capital. And the people in Control Data in turn have responded wonderfully.
One of the best examples of the desire of our employees to help occurred after the celebrated our 25th Anniversary last September. For that event, we organized a very successful international conference to explore the topic of "social needs and business opportunities," but not many employees had the opportunity to participate. Many of the sessions were videotaped, but rather than simply sharing the tapes with employees, which we did, we also wanted to give some greater significance to the anniversary event. Considering the economic times, and the emphasis being given to the importance of every employee's contribution, I chose to ask people to share with us every "bright idea" they could implement themselves. The results were amazing: 13,000 plus "bright ideas" were received by December 31, and 80 percent were outstanding to good usable ideas.

As a result of the Bright Ideas campaign and all the other work we've done in the past year, we begin 1983 in a better position than last year. That's good -- because we've a tough job ahead of us. We won't see a resumption of rapid growth this year. Revenue gains in the key peripherals and data services businesses I mentioned will be very modest. But we don't have to wait for big revenue growth to make great strides in improving Control Data's operations. It is clear to me that PPCo has more significant opportunities to improve its
operational effectiveness than any other group. Many times we overlook opportunities for important and easy to implement improvements because we tend to think of operation improvements as tied to automation, new machinery and large capital investments. Now, there's no question that we need to improve equipment in our factories and that we need to automate to a greater degree, but let us not overlook those many opportunities that we have to improve our effectiveness by improving the way we do things. I am sure you can think of many examples in your own environment which could be improved. If each of us would take the initiative to make some of those quick process and operational improvements, the multiplying effect from all of us would be enormous.

In a recent discussion with Jim Caldwell, he told me of your plans to improve effectiveness by improving the cleanliness of your manufacturing areas, by reducing the number of parts through your commonality program and by establishing design standards that simplify the manufacturing process. These are process improvements that don't require large capital investments to implement and they can significantly improve the performance of PPCo. When you stop to think about it, if each PPCo manager would come up with three process improvements during 1983, we would have more than 3,500 improvements. So there's just incredible leverage -- and all we have to do to gain it is to get the whole management team -- each person -- thinking about improving day-to-day operations.
We have an exciting and healthy business strategy -- and we can just plain get better at doing our management job. PPC is the key -- the key to improved profitability for the company and the key to unlock for each one of you the satisfaction of managing well.

Thank you.