I. Introduction

Good morning. It's truly a pleasure to be here with you at Grandview. Since we last met together, we've traveled a lot of troubled waters. During that time, I know the people of Control Data have experienced some of anxiety -- although certainly not to the degree that some of us can remember from other times. By the way, I have a simple barometer of the anxiety level in CDC -- it's the number of "casual greetings" I get which begin "how's business?" That, weighted by the inflection in people's voices, can tell you more than some of Chuck Roskam's financial reports. But I have to admit that there have been days when I felt like answering the question with the story of the two moose hunters:

[MOOSE HUNTERS]
Well, in many regards, we've come a long, long way since last year.

II. INTERNAL EFFECTIVENESS

Control Data's relatively good profit performance in 1982 -- in the face of a growth in computer business revenues of only 5.8 percent, in the face of casualty insurance losses and reserves which reduced Commercial Credit's planned earnings by some $10 million, and in the face of an economy which had a negative impact on almost all of 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.

For a business organization, being effective is a question of how well it utilizes its resources of money and people -- more precisely, it's a question of people, the processes by means of which those people achieve their work objectives, and the capital necessary to finance the task. "PPC" -- people, process, and capital -- then, are the keys to a high degree of internal effectiveness. The importance of PPC is not a new topic of discussion -- and there has been progress in this
regard. But if we are to achieve adequate operating results, PPC — and particularly process — must be the subject of much more intense management attention. So let's look at each element of PPC in turn.

People

The basic premise with regard to the productivity and effectiveness of Control Data's people is straightforward: If people believe they are working in an environment of relative job security....perceive a sense of justice and fairness....feel that what they think and do matters....have an opportunity to acquire necessary skills....and receive appropriate benefits and support services....they will make the commitment to become more productive. That is what we mean by a Fair Exchange.

Now, whether an employee senses these things depends not on what we say -- rather it depends first and foremost on what is experienced day in and day out at their local work site. And what that means is that management development, beginning at the very first level of supervision, is absolutely key. But just a lot of training is not enough -- from the moment individuals prepare to enter management, they must learn to apply those principles in the context of the area they will
actually supervise. The only possible way to accelerate that learning experience is by means of simulation exercises using PLATO. Otherwise, the whole education and training business is pretty useless. I'm reminded of a quote by Sir Geoffrey Howe, Chancellor of the Exchequer -- An economist "is a man who knows 364 ways of making love but doesn't know any women."

Anyway, without appropriate management skills -- exercised on a day-to-day basis -- Fair Exchange becomes a facade -- a corporate hypocrisy.

The whole concept of Fair Exchange also has to be consciously introduced into everyday work life. In 1982, we developed an intervention process to help top operating management understand how to do this. The process is comprehensive and includes these elements: team development, gaining management ownership of the basic principles, creation of an implementation strategy, and training in human resource tools.

Engineering services was the first organization to use this and the results that organization has achieved have been truly impressive: one whole layer of management has been removed, between 1981 and this year the pre-tax return on revenue has improved by more than one-third. So far in 1983, ROIC is running at 17.5 percent. And all that is occurring when maintenance charges for new computers are 25 to 50 percent less than those for the predecessor product line.
Now, Engineering Services is only 5,800 people -- a little over ten percent of the total number of employees. Bringing full implementation of Fair Exchange to the other 90 percent is a top priority objective for the coming five-year period.

But let me go back to the five basic principles of this "people strategy."

Maintenance of employment: In spite of all the headlines which would have had you believe otherwise, through all the economic pressure of 1982, Control Data managed to keep forced layoffs very low -- less than 1.5 percent of the total U.S. full-time employees or approximately 700 people. That's a remarkable achievement.

And we were able to do that because we'd begun implementing plans to provide the greatest possible level of job security to the greatest number of employees. The strategy regarding job security involves the creation of two types of safeguards: One type helps assure a full workload for full-time employees in the event of a downturn in business. Basically this amounts to using outside contract work and supplemental employees for up to 15 percent of our projected workload. This policy had not been fully implemented when the business downturn came in late 1981. Even so, the workload represented by reduced outside
contract work and supplemental employees prevented the forced layoff of some 2,000 full-time employees last year. Clearly as growth picks up again, we must not lose the opportunity to restructure things to include more supplementals and more subcontract work. This is a high priority item for the Operations Subcommittee of the Management Committee.

The second type of safeguard comes into play when the first buffers have been fully utilized. Such was the case last year. Techniques such as closing plants around holidays, utilizing a four-day/32-hour week, providing a time off without pay program for those most able to do so, the Employment Placement Center for internal transfers, and the new division called SWAT to which surplus employees can be assigned. This division functions as a sort of internal temporary help service by providing people to areas where there is a backlog of work to be done and on the other hand it's a buffer for surplus employees until permanent reassignments can be made.

**Equity and Justice:** The emphasis here has first been placed on prevention of problems. Recognizing, however, that some conflict just can't be resolved locally, in addition to normal grievance procedures, EAR has provided confidential counseling on both work-related and personal problems for many years.
Going beyond this, we established a peer review process last year under which unresolved work-related problems are reviewed by a panel of employees, together with an executive, but under the guidance of an ombudsperson. The panel then makes recommendations to top management. This process has been tested for a number of months in three locations. It appears to be successful both in better prevention of problems and in the panel process itself.

In 1983 and 1984, this peer review process will be put in place throughout the U.S. So most of you in this room will no doubt have first hand experience with it before much longer.

**Reward for Performance:** Certainly there is no need for me to elaborate to this audience on the crucial importance to productivity of pay, appropriate job descriptions, etc. But, interestingly enough, in a meeting with the Management Committee and top personnel executives last week, I discovered that it is in this area of reward for performance that there is the greatest lack of consensus as to what is actually achievable, much less how to do it. Somewhat ironically, then, this familiar third principle appears to be the weakest link in our strategy -- at least at the moment. So it has become a priority matter for the Fair Exchange implementation plans which each organization is currently developing.
Education and Training: Next there is the critical matter of generating an environment in which people are encouraged to develop themselves -- not just to prepare for their current job but also for their next one. At the present time, more than 1,800 different courses are available to Control Data employees, covering almost every skill imaginable. Last year employees received more than a million hours of training. But an environment for self-development goes much further than just providing a lot of CBE courses. There must be motivation for self-improvement -- a culture in which people recognize that self-development matters to their management and the company at large.

Fundamentally this goes back to the need I mentioned people have to feel that "what I think and do matters." The psychic reward -- the satisfaction -- the feeling of competence and -- yes -- of power that comes from truly being involved in determining a course of action is every bit as important to productivity as job skills. Involvement teams are a key ingredient in letting employees know what they think and do matters. By the end of 1982 there were 528 of them and their number and importance will grow. But involvement teams are only one technique. Individual managers will find many different ways to involve people and encourage self-development.
For example, last year I also wanted to involve employees in celebrating our 25th anniversary. Considering the economic times and the emphasis being given to involvement -- to the significance of every employee's contribution -- we chose to ask them to share with us every "bright idea" they had to improve performance...improve productivity. There was one provision. The ideas had to involve something the employee personally could implement.

The response was overwhelming. We received more than 13,000 ideas in just 11 weeks. I can't think of more powerful evidence of the intense desire Control Data's people have to help.

**Benefits and Support Services:** From its very beginning, Control Data has been a leader in bringing creativity to the area of benefits and support services. The degree of innovation we have had in that regard is fully as great as in the products and services we sell. You should all take great pride in the reputation for excellence you have built under Norb Berg's leadership. Evidence of this reputation comes to me from talks with other executives, in industry meetings, participation in graduate business schools, and above all from the market place.
Yes, the leading revenue generators in CDBAI are consulting products based on Control Data's human resource policies and practices. The success of products such as FOCAS has provided the impetus to establish our full human resources repertoire in a new BAI consulting group under Roger Wheeler.

**Process**

Now, at this point, I think we should pause for a minute and reflect on the following question: If we're so damned good at all these "people" things, why is our productivity not better? Why is Control Data's revenue per employee $77,000 and IBM's $100,000? More pointedly, why are our earnings per employee roughly one-third those of our competitors. Indeed, why is that true even if we compare ourselves to non-high tech industries such as food processing. The answer to those painful questions lies in the second element of the PPC formula -- process. Skilled, highly motivated people intensely churning away at inefficient and ineffective work processes produce nothing more than ineffective results.

The symptoms of ineffective process are everywhere: excess layers of management, inadequately defined job requirements, and paper, paper everywhere -- an outside consultant uncovered a simple but startling statistic last month....Control Data's
paper costs as a percent of total data processing costs are five and one-half times the average in U.S. industry. And you people don't have to look very far for examples either. In one of our field sales organizations, a process flow was done on the procedure for hiring someone. From preparation of requisitions to approval to hire involved seven personnel functions and six mailings between various geographically dispersed approval offices.

Using involvement teams is one way to attack poor process at a grass roots level. There are likewise well-defined methodologies such as statistical quality control and process flow analysis which can help managers and work groups such as involvement teams. But improving process is much more than that. It is a primary job of management. It requires a management mind set -- an intensity of dedication and thought day in and day out.

In December of 1981, we initiated an intensive effort in the area of process flow analysis. More than 3,700 employees have been trained to use it thus far and their know-how has already been applied to more than 1,100 separate processes.
The results are just beginning to be felt, but some of the success stories are impressive. Let me share with you some examples from the hundreds:

- **Peripheral Products** reduced the order processing time for spare parts from 12 to 8 weeks, and by regrouping activities in this area reduced its staff from 18 to 5 for a cost savings of $200,000 per year.

- **Engineering Services** reduced the collection time cycle for its accounts receivables by six percent and thereby generated additional interest income on the earlier deposits of $1 million per year; Engineering Services also reduced its freight cost cycle time that was another $800,000 per year.

- **Personnel and Administration** consolidated corporate and regional personnel activity -- the resulting reduction amounts to an annual savings of $471,000. In addition, by making better use of the Employment Placement Center, an annual savings of another $491,000 was achieved.

Well, in short, process flow analysis has already saved us millions of dollars, but we have very far to go. If we want to achieve 30 percent more revenue per employee or triple the income per employee, then "process" must become the byword for every manager in Control Data. Joe Carlisano will be talking to you later this morning on this most important topic.
Capital

With regard to the third element in our formula for improved productivity -- **capital** -- we continue to improve on the solid progress we've made in previous 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 inventories.

Since Chuck Roskam will go into this, I won't dwell on the capital factor, but I do want to note that it is an outstanding example of what an organization can achieve when it attacks something with determination. Between 1978 and 1981, the return on invested capital of the computer business improved from 5.4 percent to 10.2 percent. This doubling of performance was not primarily due to better profit margins but rather almost entirely to better management of capital -- the denominator of that ratio. And the decline in return on invested capital last year -- 1982 -- reflected primarily a decline in profit margins rather than a poorer accounts receivables ratio. The poor performance with regard to improving operating margins is dramatic evidence of the job that remains to be done with regard to processes and the people who execute those processes. The success of the campaign we launched in 1974 for better capital management shows what can be done if we make up our minds to do it.
III. Management

Several times this morning, I have stressed that implementation -- successful implementation -- of the many projects and policies of PPC is primarily a matter of management. Some seven or eight years ago I wanted to put down in writing some basic beliefs which not only would express my personal management philosophy, but which also would serve as the foundation of a management philosophy for Control Data. There turned out to be five of them. And I discussed them in many management groups including this group. Now that was before "PPC," before "Fair Exchange." But as those strategies have unfolded, it is even more clear to me that the management team which is required to execute them must embrace those five principles as its driving force -- it must not only believe them, it must live them.

Today, I want to review those five principles with you.

The first has to do with motivation. Why should a person want to manage? What is the reward? The answer is straightforward: The managerial job offers one of the best opportunities around for a meaningful life. Dealing with the complex interaction of people, the work to be done and change in the world around you is challenging, exciting, and
satisfying. But beyond that, management offers the opportunity
to work with others in the most rewarding way conceivable -- to
simultaneously learn from and teach others. That means a
desire to learn and openness of mind are fundamental to
managerial excellence. The satisfaction -- the reward -- that
comes from this teaching/learning process exceeds all others.
If you don't want it, don't feel it, then don't manage.

Not long ago I read the development plan for one of our
managers in Control Data. His goal was stated as follows: "I
would like to be involved in advanced technical work -- not
necessarily as a project manager -- after I have achieved my
goal of becoming a vice president." Isn't that incredible?
Isn't that sad?! A technical person who really doesn't even
want to be a project leader -- whose motivations are apparently
non-people driven -- straining to be a top executive in order
to achieve recognition, or money, or something.

On the other hand, let me give you a personal example of what I
mean by reward. MCC was formally launched in February after a
year of effort which began by assembling a group of 15 total
strangers. These people had two things in common: 1) They
were concerned about the on-coming technological competition
from Japan, and 2) they feared the idea of cooperation was at
best impractical and at worst probably illegal, if not
immoral. In the end, of course, the fears were overcome and the concern was forged into a powerful positive force. A few dropped out but the rest became a team with a mission. As a team we accomplished something people said couldn't be done -- and I had the satisfaction of being its leader. I assure you no matter what your job title, you can't buy that kind of feeling of satisfaction and pride and confidence with any amount of money. People, honestly supported, given guidelines of integrity, and truly motivated can accomplish incredible things. And, managers make that happen. That's their reward for excellence.

The second principle concerns management style. By style, I mean the development of an individual approach to achieving goals and sharpening your perspective and abilities, of dealing with your people. When I'm out cross country skiing or back-packing, I notice that none of the people have quite the same equipment or style. But, they utilize what it takes to suit their needs and to help them get where they want to go. You need to develop and master an individual style that is comfortable for you -- to get your job done. Implicit in this matter of style -- the point of it actually -- is the managers obligation to provide an environment that will enable his/her subordinates to realize their full potential. (We're back to that concept of "involvement" again!) The manager must genuinely want to see them succeed and, of course, also make sure they are recognized for their success.
In our subordinates, as in ourselves, we will find fears and anxieties, the fear of failure, just plain concern. As I mentioned with regard to the formation of MCC, these are useful, even powerful motivators. But on the other hand, the manager with insight and balance knows the difference between "use" and "exploitation." Accountability and consistency are the keys to managerial balance.

Accountability will produce self-improvement, self-motivation and self-discipline. Any tyrant can induce "sweaty palms" -- but good leadership will induce self-discipline.

Consistency will be founded on a strong set of personal beliefs -- the product of study, understanding, and willingness to form opinions. Consistency will come to the manager, more than from anything else, if the objective of furthering the enterprise is placed above all others -- including the manager's personal goals. That might sound like the old call to "give all for the common good" -- and to some degree it is. But fundamentally, I'm talking about perspective -- the manager's ability to view and achieve personal goals in the context of the whole.

The third point concerns challenge. In a large organization, a manager's greatest challenge is to encourage risk-taking
change. The responsibility for and importance of this grows greater with the higher level of management. Innovation is simply not in the character of large organizations -- it must be consciously induced. The people who innovate more frequently than not have characteristics that make them unappealing to the organization at large. Indeed, they frequently work at cross purposes to the objectives of the organization. So these people are a great challenge -- they must be nurtured. On the other hand, a manager must remember that while most innovators are mavericks, most mavericks are not innovators. The group of managers in this room has the particular challenge as I remarked earlier of continuing a long tradition of innovation.

Another kind of challenge is the need to sort through conflicting requirements or constraints. That sounds so obvious, but believe me, the ability to do so is a rarer talent than you might think. It is a major reason why people fail to achieve top management jobs.

In Control Data, we have developed an excuse -- a cop out -- regarding managing conflicting requirements. That excuse is the term "matrix management." We have bastardized the term so badly the only meaning left is "I've got a problem -- a problem I'm incompetent to solve." Time and again I hear people
referring to "the matrix" when describing problems involving mundane conflicts between market requirements, and resources. It's pernicious and it's got to be stopped.

Just last month I was reading a review of an executive which said he "must learn to deal with the matrix." Now, this person works in a totally self-contained profit unit with its own product line and he had only one boss -- no dotted lines. Fascinated as to why he had a "matrix" problem I read on. Finally I came to the development needs portion which entailed several prescriptions to build teamwork skills. Honestly!

Now, the need for teamwork is indeed a part of our management lives. But instances of matrix management in Control Data are actually quite rare. Yes, that's what I said -- rare. One of the few is in U.S. Marketing where sales people have both a geographical and a product line chain of command. Almost everything else I hear referred to as a "matrix" is just a case of a functional interdependency or a normal staff and line relationship.

Believe me, if you can't manage interdependencies, you can't manage at all; if you believe interdependencies can be organized out of life, you are doomed to frustration -- not just as a manager but also as a person. And for sure if we
want to "shape tomorrow together" we better learn the
difference between simple teamwork and complexities like matrix
management. So I've adopted a simple rule: If someone wails
to me about one of these non-existent matrix situations, I just
lower my estimate of their management potential.

The fourth belief is about management responsibility. Here I
go beyond the responsibility for leadership within the
company. As individual managers, we accept a dual
responsibility: one as a leader of the company, and second as
a leader of the community. Our responsibility also means an
ability to communicate. We cannot afford to allow any
individual or group of individuals -- at any level -- to erode
our effectiveness as a business. We cannot be tossed back and
forth according to the whims of uninformed people whose main
purpose is to harass instead of to be of value.

We have all heard the debate over whether business has a
simplistic purpose -- profits -- or a more complex purpose,
including the broad area termed social responsibility. We can
state the purpose of business simplistically -- it is
survival. Only by staying healthy can it serve its several
stakeholders. But financial health is only one dimension of
the problem. Social change can just as surely threaten -- or
provide opportunity to -- a business in its quest to survive.
The responsibility of the manager is to correctly sense the environment and its changes and establish strategies to insure survival. By participating fully in that environment, he or she enhances the required awareness of change.

Fifth, and last -- the personal resources of managers. The managerial job is physical, emotionally and mentally demanding. The manager has an obligation to carefully nurture his/her personal resources -- health, intellectual well-being, and time. These personal resources are highly interdependent. Mental alertness is impossible with a sluggish body. Mental confusion and distress lead to physical deterioration. And disorganized use of time can induce pathological states in either body or mind. Failure to care for our personal resources can result in subtle deteriorations. Time scales tend to be extended. The results of a missed opportunity -- or lack of vigor -- or just plain sloppy thinking -- are seldom immediately apparent. Yet a sense of urgency is fundamental. And a proper sense of urgency is not possible to people who are physically debilitated, mentally dulled or emotionally unstable.

So, those are five simple beliefs on management. Reward, style, challenge, responsibility, and personal resources. As difficult as those things are to measure, believe me, we will know when they form the touchstone for Control Data's management group.
IV. Conclusion/Challenge

From 1975 through 1981, we had seven solid years of improvement -- years in which there was growth in profitability and progress in many dimensions. The interruption of that progress in 1982 was a difficult thing to accept -- for me personally and for all of us as a group. And 1983 will be no automatic rebound -- we won't get back to 1981 levels of performance in terms of return on invested capital. On reflection, however, it has probably been exactly the dose of realism we needed. It's clear now, in spite of a lot of progress, that without some fundamental changes in management process, we were never going to reach the financial goals we had set for ourselves.

What must be done is now clearly in focus and with determination I know we will achieve our goals:

- With regard to capital, we must maintain the momentum nine years of effort has given us.

- With regard to people: First, we must retain the creativity and innovation that has characterized Control Data from its inception. Second, this must be coupled with an intensive management training program based much more on simulation exercises than is now the case.
Third, the whole issue of layers of management must be vigorously addressed and fourth we must articulate and detail how to truly implement the concept of reward for performance. Above all, however, is the need for improved process. This is not some grandiose thing -- it is a matter of everyday work -- it's not the job for some special staff -- it's a job for every manager -- for each and every one of you.

It's a demanding task. But if you nurture your personal resources of health, time, and intellect; accept the responsibilities and challenges of management with honesty and humility; take on the task of developing yourself to the role of leadership; if you do those things, then the reward for Control Data and for each of you as individuals will be beyond your imagination.

Thank you.