First of all, let me add my own welcome. And to say I sincerely wish each of you more challenge at Control Data than you think you can handle - to be followed by the satisfaction and reward that comes from meeting the challenge after all.

The opportunity for me to talk to you tonight is really a pleasure. I mean that. Most of my time speaking is to managers - telling them what must be done better, differently, or whatever. (Jim Taylor's Story)

I also feel a bit like another person I saw once at the opera. (Opera Story)

But you represent something different - a super prospect for the future.

You know they tell a story about Bernie Bierman, the great coach of the U. of Minnesota years ago. A newspaper reporter asked Coach Bierman, how he identified top prospects. Bierman's answer was "Well I drive out in the countryside and stop now and then at pastures where I observe a young man plowing. I ask if he knows the way to Minneapolis. And I know I'm onto something if he picks up the plow and points."
You have all, in your own way, picked up your plow and pointed. So tonight I'd like to talk about some of the challenges you and I will face in the coming years at Control Data.

Let me start with a couple perspectives on Control Data and what it is we do - or in fancier words - our corporate business strategy.

First of all, Control Data is commonly thought of as a high-technology company - computers, peripherals and so on - and, of course, it is. But that really isn't the key to understanding Control Data - or its business purpose. In fact, history would help you more than electronics to gain the proper understanding of what our opportunity is, and what drives us.

So to get perspective on what will be one of the greatest companies of the twenty-first century we have to drop back to the 14th century. That was a time of fundamental change in world society. In the four years from 1347 to 1351, one-third of the western world died of the bubonic plague. The hundred years war between England and France, which lasted into the fifteenth century sapped the strength of those countries and, more significantly, destroyed the confidence of the people in
their feudal leaders. To top it all off, the schism in the church nearly destroyed it as an effective institution. Yet in the midst of all that calamity was born a man named Johan Gutenberg who produced the technology of the last great information revolution. By the 16th century, the western renaissance was in full swing and by the 18th of the industrial revolution was in process.

It is important to understand that the printing press did not dictate change - change had occurred in natural and man-made calamity. But the technology fit the times of rising individualism and led to the basic concepts and structure of western society as we know it today.

But let me continue the threads of history. In the last 300 years, the number of people on earth has increased by a factor of 12 or more. And the distribution of those people has amplified the density effect. Only 100 years ago, two-thirds of the U.S. population lived in rural areas. Today three-fourths live in urban areas. Population growth is also now greatest in the poorest areas of earth. Is it any wonder that the demands for change have accelerated so rapidly? A world in which human interdependence is one or two orders of magnitude greater simply cannot be ordered in the same fashion as before. And it won't be.
And, once again, just as in the 15th century, into our scene of enormous change has come the technology for an information revolution. That is where we stand today.

No industry in the history of mankind has had the kind of growth and change that we are experiencing. One observer has calculated that if the aerospace industry had developed as fast as the computer industry man would have landed on the moon in 1910, just eight years after the Wright brothers' first flight at Kitty Hawk.

Another measure of the growth of the industry would be to look at its technological evolution. In 1959, a transistor used in computers cost $20. Today, a faster, more reliable device on a tiny chip costs one cent, 1/20,000th of the 1959 price. That means $100 worth of computation in 1959 can be achieved for one cent today.

If the auto industry had done the same, today, we would be able to buy a Rolls Royce for $2.50.

But, as I pointed out, there is more to it than just phenomenal technology. Our industry is caught up in one of the major transitional points of history.
And while no one can predict the future, the list of societal needs of the future is clear. Those needs arise from the basic situation in our world today that I described. They include more and cheaper energy; lower food costs; more available and less costly health care; revitalized cities; lower cost, more available and higher quality education; better accessibility to technology and more jobs - especially skilled jobs.

Meeting those needs offers to those willing to take the challenge a business opportunity of enormous proportions. And Control Data has evolved to a position of being uniquely equipped to assist in solutions in all of those areas.

Now what that means to you and me is a simple but important thing: that there will be plenty of growth, change and opportunity in Control Data to do exciting things. Not just technologically exciting things, but things involved in the main thrust of world activity. (Involvement Story)

The second important perspective of Control Data is that though it is a very big company - more than 2 billion dollars in the computer business alone this year - it really comprises a lot of very little businesses. There are fewer people in the Education Company today than in Control Data when I joined it eighteen years ago. Yet that one business is destined to be
larger than our total company is today. Although our computer mainframe business is fairly large, there are eight other entities contained within Computer Systems that are smaller than Control Data was fifteen years ago.

Data Services is made of literally dozens of little businesses and Peripherals, outside of the large disk and media businesses, likewise is a group of small businesses.

What does that mean? It again means opportunity as these little businesses grow. But more than that, it means a chance to have a broader perspective - to work in a smaller group and one in which creativity and individual initiative are in high demand.

At the same time, I hope it does not mean learning everything - from scratch. I was about the 700th employee of Control Data. Today there are over 50,000. And I sure wouldn't wish on you learning some of the things I had to learn the hard way.

That's one reason why training has been such an important part of my management philosophy. Of course, in the early days we simply couldn't afford adequate training. But for the past five years we have worked hard at increasing the breadth and depth of training available to all of us in the Company.
The eminent management educator, Peter Drucker, has said that there is only one way to train people fast enough to keep pace with our rapidly evolving technology. He said we must systematize and program all currently relevant information about a given skill - then supply it on a consistent basis. Computer-based education is the key to being able to do that.

Control Data is solving education and training objectives on a broad scale through the development of computer-based education. Of course, CBE represents not only a solution to internal needs, but as I have already mentioned, is a major external business opportunity as well as our PLATO CBE courses are now used in training programs by many business organizations, either on-site or in over 50 Control Data Learning Centers located in major U.S. cities.

One of the things I have been dissatisfied with is the training for new hires - especially new graduates in Control Data. Outside of our marketing organization it has been poor. There is no other word for it. Well, today is the day that marks the end of that state of affairs.
Effective training and continuing education is vital to achieving professional performance. You have my commitment tonight for increased training opportunity across all job categories. And, as the man said, you can take that to the bank.

Training, on the other hand, can be looked at simply as a way of sharing knowledge. Most times, knowledge gained slowly percolates through an organization. Typically it has been reinvented or rather rediscovered many times over. Finally, it is distilled and made a part of formal training processes - by which time it can be out of date. In a business as dynamic as ours, this simply won't do. CBE is part of the answer, but not all. There needs to be quicker, easier ways for people to exchange knowledge and share learning experiences and, here too, the computer can help.

In the past two years, knowledge transfer systems have just started in Control Data. First came FIRMTEC, a computer-based information exchange system. Now there are data base exchange systems in sixteen different areas of our Company including Professional Services, Field Sales, Engineering Services, Personnel, Purchasing, Manufacturing, and Commercial Credit.
For example, an application named the Preferred Parts Data Base, is maintained by our Standards Department and used daily by design engineering, manufacturing, Q.A., purchasing, and receiving. Another application, MARKTEC, is now being implemented for your use. "ARIES" permits customer engineers to more effectively locate "bug-fixing" documentation. And, I could go on and on. What it nets down to though is more available know-how for you.

Finally, a word about job satisfaction. Some people work for power....or recognition....and that's certainly important. When you've done a good job, you like to have someone recognize you for it. At Control Data we have many ways to show our recognition for superior performance. For example, in Systems - 25 people. I'm sure that in future years I'll have the opportunity to share some such occasions with some of you who are here tonight.

And, then, of course, there's the matter of money - and that's important, too. But money and recognition are still only a part of it.

The greatest reward that I know of comes from the inner satisfaction of achievement - of knowing you did something you weren't quite sure you could pull off.
Most successful....and happy....people I know thrive on the heady satisfaction that comes from doing an excellent piece of meaningful work. And that leads me finally to my job. That I view as providing you the organizational environment that gives you the opportunity to know the inner satisfaction of which I spoke.

Every one of you and the contribution you are capable of making is important to Control Data and to the objectives I outlined earlier. I want you to have that chance.

Ten years ago we pulled together a collection of small businesses whose total revenue was only a hundred million dollars or so. We set a goal of $1 billion dollars by 1979 - a goal, by the way, which will be achieved by those businesses next year, 1980. I wrote to my management people to set forth that goal and to commit to them an organizational environment that would permit their maximum contribution. I closed by saying "just remember - it may not be easy, but it sure won't be dull."

The same goes for you.

Again, welcome to Control Data.