Introduction - Overview

1984 -- the watershed year of the 80's. As we were about to enter this decade, in my Direction '80 remarks I observed that it could "be the most exciting in our company's history" because it could be those years in which "the concepts and basic strategies previously laid down become financial reality." I also observed at that time that for many the decade to come might well be known as the "aching 80's." That particular term has proved to be more apt than I ever conceived!

In a half century of rapid change this particular decade has thus far been the most turbulent of all. The economic swings since January 1980 have been the largest in a half century. Moreover, they have served to accelerate and reinforce an already awesome rate of technological change. Just stop for a moment and reflect on your own area of the business -- the technology, your competitors, your own products and services -- peripherals? financial services? computer services and computer systems? -- anywhere you look in Control Data the changes since 1979 have been enormous.
We have had to run harder and harder during the past four years in the face of economic adversity and increasing competition. And where are we? Well, earnings per share increased from 1982 to 1983 and that's more than gratifying -- it really reflects solid performance. But we also have to realize that we are essentially back where we were in 1980.

Of course, numbers really don't tell the whole story. For not only have we endured, so to speak, we have, as I predicted in November 1979, made great progress in implementing our basic business strategies and adapting them to the change which swirls around us. So in more than a chronological sense, 1984 must be a watershed year for us in Control Data. Our plan calls for a year of high growth -- some 15 percent -- and record earnings. But beyond that it calls for us to establish a platform of performance which will assure continued growth in profitability throughout the remainder of the decade.

In order to do that, we must isolate and attack fundamental issues and this must be done at every level of management. We have done that at the top level of the company for two years now, and it is already beginning to pay off. We will do it again in 1984. In fact a two-day session on January 3 and 4 of the Management Committee was devoted to that subject. For Direction '84, rather than lay on you a series of strategy speeches, we thought it might be more meaningful to let you share in some of that session. Thanks to television we are able to do so....and you'll be seeing that in a few minutes.
Before that, let me set the strategic stage with a brief overview of where we are and what we are about as we enter 1984.

**Commercial Credit**

No operating unit faces a tougher challenge in 1984. The financial services industry is changing faster than almost any segment of American business. Commercial Credit must not only forge and execute new business strategies in this highly competitive and uncertain environment, it must also make fundamental changes in the way it operates.

Almost all of its major competitors in the commercial and consumer finance have substantially out-performed it over the past six years in net income as well as in other key indicators of profitability.

In 1984 we will deal aggressively with this unsatisfactory profitability. A key element of the problem is that operating expenses constitute a much higher percentage of revenues than is the case with its competitors. This was one of the factors recently cited by Moody's when they downgraded their rating of Commercial Credit's debt. So reduced operating expenses are essential if we are to reach an acceptable level of profitability.
But expense reduction is only half the way to improved profitability. The other half is revenue growth — which entails not only more profitable employment of funds but improved sources of funds as well. With regard to the latter point, Commercial Credit will continue to reduce its dependence on borrowed funds as a source of money by increasing the use of thrift deposits. Thrift deposits will enable the financial services business to be more leveraged which means more competitive rates and eventually improved profitability through higher returns on equity. Thrift deposits doubled to about $1.5 billion in 1983 and the plan calls for $2.5 billion in thrift deposits by the end of next year.

With regard to employment of funds, in some cases the strategies for the operating units are in place and only need clarification and improved implementation. For example, work done in late 1983 on the strategy of small business services should lay the groundwork for improvement in this unit's performance in 1984. I should note here that it has been evident for several years that Commercial Credit has to move to become a significant provider of so-called non-cash services to small business if it is to succeed in the long-term. The Business Center strategy, which provides for the packaging of non-cash and cash services to selected small business markets, is the key to this evolution. Commercial Credit has made a
substantial investment in the last three years in services to small business. Some of this was, unfortunately, wasted effort, but the basic concept is fundamentally sound and the eventual pay-off will be enormous. Although there is much hard work and still some red ink ahead, the Business Services organization is turned on and looking to the future, not to the past.

In some other cases strategies are still developing. An example is in Real Estate Services. Absorbing E.R.A. would have been no easy task in the best of circumstances and the recent recession in the housing market was the worst of circumstances. But we can now begin to realize the enormous potential of the E.R.A. network. That network will process about 120,000 real estate transactions in 1984 and, among other things, it can be a growing source of first mortgages.

Time does not allow me to discuss other major strategic directions for 1984 in Commercial Credit in operations such as International Financial Services, Corporate Services and Insurance. But we look forward to improving results in all of them.

1984 will be directed to making Commercial Credit a lean, responsive and market-oriented operation, linked much more closely to the computer business. The fundamental synergy between financial and information services is unmistakable and that synergy can create a stronger Control Data for all of us.
Peripheral Products

Now let me turn to the peripherals business. As many of you know, the past two years have been very difficult ones for Peripheral Products. Peripherals is simultaneously facing challenges to dramatically improve product quality and to reduce manufacturing costs in order to remain competitive with a growing number of foreign and domestic competitors. At the same time, ever higher levels of technical expenditures are required as technology turns more rapidly and product life cycles become shorter. In addition, the business is becoming far more capital intensive as the need for automation and sophisticated test and production equipment grows. Meeting these imperatives has meant a short-term setback in the profitability of peripherals in order not to sacrifice its long-term future. The challenge for the coming few years is how fast and far can we come back along the road of profitability.

Let's talk for a moment in a little more detail about technical effort and capital equipment. Technical effort for Peripheral Products will grow by 80 percent in the next three years and capital equipment appropriations will double. In 1984, a substantial portion of technical effort and capital expenditure will be directed at various aspects of advanced technology -- particularly the thin film head and media programs. The first product to benefit from this investment is the 33800 disk storage system.
The 33800 has completed its development and testing phase and initial production has begun, but we are behind established milestones for this program and these delays will have a negative impact on Peripheral Products' 1984 financial performance. But that's really only a short-term consideration. The product and a follow-on double density version are needed not only by the plug compatible market but for Control Data computers and our partners in MPI for their computers. Beyond that, the basic thin film head and media technology is essential to many other OEM products -- such as the Cricket, FSD, Wren, and XMD.

Now to the question of how far and how fast. As a result of making the investments I mentioned, we will return to growth and profitability similar to that achieved prior to 1982. For example, revenue growth rates of 20 percent per year are achievable. That compares quite favorably to the average growth rate in Peripherals since the mid 1970's. Likewise, within the next five years a sustained level of return on invested capital will be achieved which matches what we were previously able to do only in peak periods. At the same time, in view of the increasing competitive picture and the need for larger investments, it is going to take longer to get there than we envisioned some years ago.
1984 is the first step back along that path of improved financial performance. The aggressive use of new technology that has resulted in 16 new products over the past 18 months is starting to pay off for us and we are committed to maintaining our position of technology and market leadership.

**Computer Services**

Let me now shift emphasis a bit and focus on an area of the company where execution of new strategies is paramount. There is no place in Control Data where focus on market requirements is more important than in Computer Services. For this area of the business, the double effects of advancing technology and the recession have caused some real dislocation -- they have likewise created a host of new opportunities. Take Data Services.

Throughout the late 70's and early 80's, the increasing availability and capability of mini and microcomputers made it obvious that Data Services, as it had developed over the preceding 15 years, was changing away from the classic timesharing prescription. Not only was the variety of cost effective delivery vehicles multiplying, the software applications, which previously were mostly created by the end user, became more available as off-the-shelf products.
The strategic issues of 1982 and 1983 clearly identified our lack of response in this regard. Boiled down they said, "less delivery vehicle orientation and more market/application orientation." And that, for example, has led to the formation of CIM, the Computer Integrated Manufacturing division. In short, CIM is a market focused division which makes use of all the products and services that the company provides to satisfy the needs of manufacturing companies.

Like other market focused divisions, such as Arbitron or Ticketron, CIM has dedicated technical and marketing people. By understanding the market we will be able to provide better and faster solutions to our customers' rapidly changing needs.

Another issue which received Management Committee attention in 1983 involved the technology and future needs of the Data Services network. During discussion of this issue, it became clear that technological cooperation was essential. As a result, we have initiated the first significant joint venture in networking with United Telecommunications, Inc. in Kansas City. The purpose of this joint venture is to define, develop and install a next generation packet switched network. Over time, this will give our customers the features they require, at lower cost to us; and most important allow us to divert valuable technical effort dollars to applications development.
The results of examining strategic issues dealing with marketing and market focus, the use of microcomputers in Data Services businesses and improving the development cycle all pointed to significant strategic changes for our services businesses. And this is now well underway.

All in all, 1983 was a year of some of the most important new beginnings in Data Services since the early 1970's. But that's precisely what they were -- beginnings. The Direction for '84 in Data Services is intensely focused on implementation -- effective execution of these new plans.

Health Care Services is a part of Computer Services where a long standing market and application focus was already beginning to pay off in 1983. And 1984 looks even better. For example, at Medlab, we are currently marketing a product called "Help," which is a powerful new approach to assist physicians and hospital staff deliver medical services. It employs advanced techniques such as an "expert system" and provides the framework for a total service assistance system.

Moving on to Education Services worldwide -- now nearing a $150 million business in its own right -- saw PLATO training for business and industry take its place beside vocational educational services as a mature business. While both these segments have enormous challenges of profitable growth ahead of
them, by far the greatest education challenge is in another area -- the academic marketplace -- and particularly the K-12 market. By itself this represents a billion dollar opportunity. And in spite of all the media emphasis on microcomputers in schools, the truth is that the market is only beginning to unfold. The key difference between Control Data's education strategy and everything else that we see in the marketplace today is that PLATO can bring productivity to the education process that cannot be obtained in any other way. It's the difference between treating computers as yet one more fancy (and expensive) audio-visual device and the use of computers as workstations which are the basis for the whole educational experience. During the past 20 years we have learned the difference and in fact our very own Control Data Institutes are an example of the success of the right way to do it. Bringing this "total productivity" approach to the schools is a marketing task of awesome proportions and is a challenge not just for 1984 but for years to come.

Another aspect of the focus on market orientation is the utilization of PLATO as a training element for many other Control Data products and services. Some divisions have realized that if they want to install end user applications in the most efficient and profitable way, then they have to utilize and leverage technology, computer-based training
technology, to get this done. A major emphasis in the Computer Services Company in 1984 will be to incorporate PLATO features in the training packages which accompany all the other products and services. Everything we have developed with PLATO puts us in a pre-eminent position to really earn the label of "user friendly".

The theme in Computer Services of powerful new beginnings and enormous future challenge in execution carries over to the international arena as well. All through the late 70's and early 80's we talked about the importance of services in our international business -- but it was mostly talk and little result. 1983 was different.

New application services such as Arbat, and several joint venture approaches -- a principal one being our investment in Systime which is a provider of information processing equipment, software and services in the U.K. -- all lead me to believe that we are finally on the right track.

The introduction of both software and courseware applications into a number of countries is already generating revenue based on solving customers' problems. Growth and profitability are the twin challenges ahead.
Computer Technology

Several times I've already referenced the subject of technology leveraging -- particularly through cooperative ventures. Nothing is more essential to Control Data's future health. We made a lot of progress in 1983 and yet much more must and will be done.

Technical effort expenditures will double in the next five years and yet we can be certain that those resources will not match our needs. Each successive advance in computer technology requires a greater commitment of capital resources and intellectual talent than did the last. As a result, many companies -- and Control Data is no exception -- are in a position of possibly being forced to pursue fewer and fewer technology alternatives -- and that brings with it high risk of falling behind and becoming unable to compete in the long term.

Cooperation is part of the answer. Another part is vastly improved productivity -- effectiveness -- of technology development.

Let me take first cooperation. It has many different flavors. It ranges from joint ventures such as MPI and the new network joint venture with United Telecommunications to participation in the development of advanced technology. MCC
(Microelectronics and Computer Technology Corporation) and SRC (the Semiconductor Research Corporation) are examples. Further cooperation includes limited partnerships such as the one launched in 1982 for the S/O computer, and most importantly it includes technology cooperation with affiliated companies which Control Data is helping to spawn.

The prime example of that last approach is ETA Systems. The business purpose of ETA is, very simply, to design, manufacture and market the world's fastest, scientific computers. In order to do this, the architecture, the circuit technology and software being developed for successor machines to the CYBER 205, has been transferred to ETA. Thus, initially then the technology is flowing from Control Data to ETA, but over the years that flow will reverse. One of the major benefits of supercomputer development at Control Data over the years has been the flow of technology from it to the lower computer product lines. So, with the ETA agreement that flow will continue. The ultimate beneficiaries of this exchange will be all our customers -- present and future, from the very top to the very bottom of the product lines offered by each company.

This brings me to the issue of effectiveness in technology development. Today we have 5,000 scientists, engineers, programmers, and technical support people engaged in company
sponsored technical effort -- and that excludes technologists who are doing contract work specifically for our customers. Company sponsored technical effort expense is running at more than a third of a billion dollars per year.

Productivity of these resources is vital. As just one example -- to be truly competitive -- by 1988 we need to cut the time for development of a new computer to half of today's acceptable norms. Examining this problem has been and continues to be a priority issue for the Management Committee.

From all I've been saying about computer technology, computer services, financial services and peripherals, you can see that the important issues we face basically revolve around responsiveness of the organization. And that word responsiveness characterizes the focus of attention, the concern, of the Management Committee -- it is the driving force of Direction '84.

Responsiveness requires two attributes: First, appropriateness of the response and second, effectiveness of the response.

"Appropriateness" entails all the things I've talked about regarding "market" or "solutions" orientation, "focus" and so on.
"Effectiveness" is a matter of my repeated emphasis on PPC -- people, process and capital.

In a few words let me try to tell you just how important the element of effectiveness truly is. To achieve our goals will require record levels of strategic expenditure -- technical effort, marketing, capital equipment -- in 1984, and for that matter in each succeeding year. We will either obtain those funds from improved operational effectiveness or by borrowing them. The former will allow us to grow in profitability; the latter is double leveraged to reduce profitability through higher interest costs on top of the expenditures. And the net result of that in the long run is that we will be precluded from pursuing our strategies at all. So it nets out pretty simply. Through appropriate and effective response to our challenges we can shape a better tomorrow. It's management's job to see that that happens.

Thank you.