

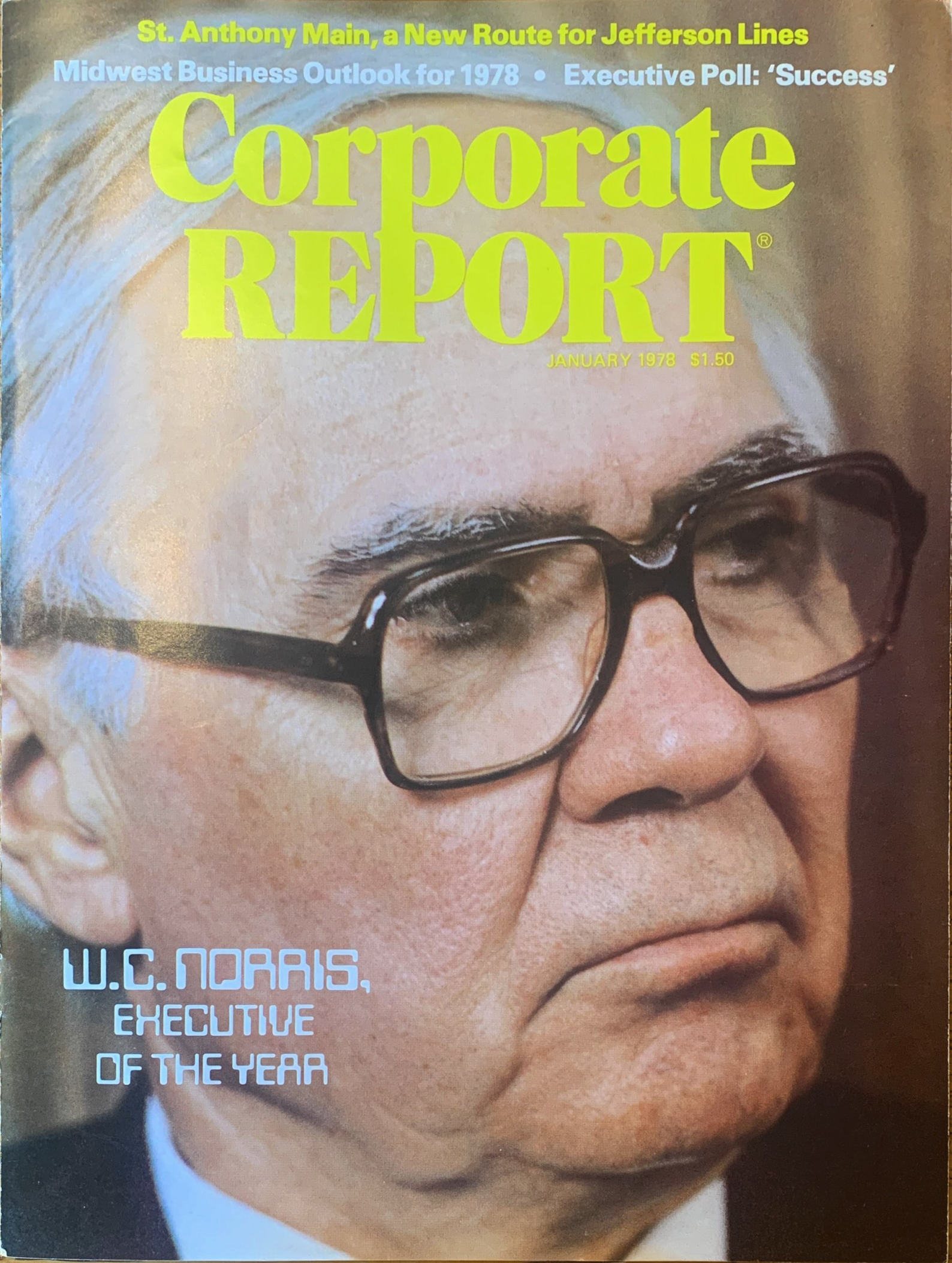
St. Anthony Main, a New Route for Jefferson Lines

Midwest Business Outlook for 1978 • Executive Poll: 'Success'

Corporate REPORT[®]

JANUARY 1978 \$1.50

**W.C. NORRIS,
EXECUTIVE
OF THE YEAR**



President's letter

Looking at success...

By William J. Dorn

It wasn't planned this way, but in reading the galley proofs of this issue of *Corporate Report* I would have guessed that the editors had put together a special edition around the theme of "success in business." In retrospect, it's turned out to be a highly interesting editorial package.

Leading off, of course, is the cover article on this year's Upper Midwest Executive of the Year. It's one of the premier success stories, personal and corporate, not only in this region but in national and international business circles.

It's the saga of William C. Norris and Control Data Corp., an odyssey which began a mere 20 years ago, when a hot new high-technology computer company started from scratch. Two decades later it exists in the heady atmosphere of the giants of business, its volume now exceeding \$2 billion. Along this short journey it has created spectacular wealth for numerous early investors who bought the new Twin Cities stock over-the-counter. Those who benefited in such large measure are exceeded in number only by those who bailed out after relatively modest financial gains.

And Control Data has not done badly by its founder, thanks to his own genius and efforts. In November of 1973 Bill Norris was among Minnesota's 12 wealthiest citizens (*Corporate Report*, November 1973), albeit attaining a mere 12th on the list with an estimated net worth of \$30 million. This was due largely to his holdings of a quarter-of-a-million shares of Control Data stock.

The history of Control Data and a picture of its present scope and breadth of operations is covered by contributing writer Ken Johnson, who is a vice president of Piper, Jaffray & Hopwood. Johnson sees an optimistic outlook in earnings per share and says prospects are encouraging for future growth of dividend payments. The first dividend—15 cents per share—was paid last April.

Bill Norris, the person, is profiled by managing editor Charles Mundale, who interviewed Norris on two recent occasions and spent considerable time interviewing Norris' associates, past and present, to gather their impressions of and comments about the man.

What he found was a webwork of seeming paradoxes: a man who brilliantly builds a corporate giant while insisting that "small is beautiful"—in business, in farming, in many aspects of life; and also a man greatly



Bill Norris: a 'fierce fisherman'

concerned with today's social problems and committed to business and industry's role in helping to solve them. Norris, as Mundale points out, renounces idleness and luxury and espouses self-control and hard work. And he is shy—except among those with whom he is comfortable. They experience his geniality and good sense of humor.

Managing editor Mundale is a veteran journalist who spent several years as a university professor of political science before returning to journalism with *Corporate Report*. He related after completing the Norris article that

he kept thinking back to an observation ascribed to the wife of Soviet revolutionary leader Vladimir Lenin when she was asked what her husband and his fellow Bolshevik leaders did for recreation. "Most of them go to the theater," she replied, "but Vladimir goes for walks. Vladimir is a *fierce* walker."

Persons close to Norris told Mundale that Norris does not take much time out for recreation, but when he does, it's usually for a few days of fishing. Even while fishing, however, Norris likes challenge and discipline. He uses the lightest possible tackle, his associates reported. "It appears," concludes Mundale, "that 'Bill is a *fierce* fisherman'."

□ Continuing the "success" theme is Executive Poll, the *Corporate Report* feature in which a panel of executives from the region's 100 largest publicly held companies regularly give their views on a broad spectrum of issues. The topic this time is what makes an executive successful. Specifically, we asked these executives to look inward at the qualities responsible for putting them where they are in corporate leadership. Some answers were predictable. Some were not. All are frank. If you're successful, or bent on being so, you'll be interested in the findings of this survey, done by market researcher James R. Frankenberry and executive editor William Swanson.

Editor Don W. Larson gathered six successful executives in *Corporate Report's* conference room in mid-December for the annual look to the year ahead. They included last year's Executive of the Year, Jenó Paulucci; Burlington Northern's Frank Coyne; Clarence Frame of First National Bank of St. Paul; mutual fund manager Steven Leuthold; Richard McFarland of Dain, Kalman & Quail, and Richard Schall of Dayton Hudson.

Though generally positive toward the economy, this prestigious group raises a warning flag regarding the potentially destructive force of worsening inflation. It must, they feel, be effectively combated in the year ahead.

The success theme carries through several other features and columns in this issue. Staff writer Wayne Christensen reports on Louis Zelle's efforts to restore the Twin Cities' historic St. Anthony Main area by applying the know-how used in his successful Jefferson Co., a major bus line. ■

BILL NORRIS: THE VIEW FROM THE 14TH FLOOR

**Corporate Report's Executive of the Year wrestles
with the partially controllable data of the future...**

By Charles I. Mundale

There is the world of ideas and the world of practice . . . neither is to be suppressed.

—Matthew Arnold

There is a temptation—as Arnold implies—to suppress one side or the other of a duality, but serious minds have always wrestled mightily and consciously with oppositions, paradoxes and contradictions.

Perhaps this is why William C. Norris sits in his 14th-floor office at Control Data Corp.—an industrial giant whose annual revenues now exceed \$2 billion—and contemplates the limitations of bigness. Perhaps this is why he will declare in speech after speech that “technology is the well-spring of new jobs” and then tell you in an interview that computers—which are virtually synonymous with Control Data—will direct 90 per cent of American automobile manufacture within 10 years. Perhaps this is why he argues that the price of gasoline should go to \$2 or \$3 a gallon “to turn the screws down” while watching people 14 floors below come and go across elec-

trically heated pedestrian and vehicle ramps. Perhaps this is why a visitor to Control Data's headquarters—a massive, straight-up, towering blockhouse in Bloomington, Minn.—parks his car beside a spindly, tapering farmstead windmill.

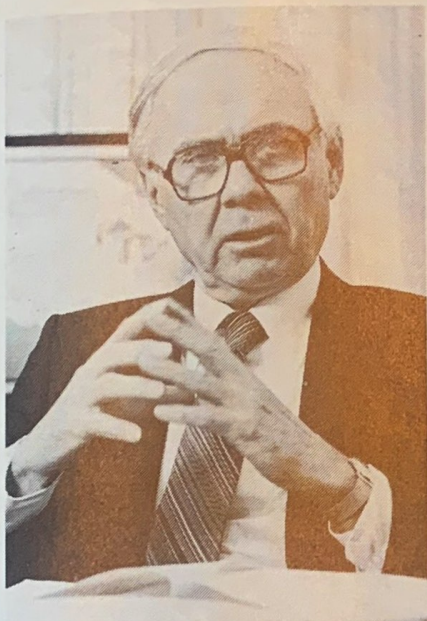
Perhaps Bill Norris struggles with the paradoxes and contradictions of contemporary existence because he is surrounded by them, and they are simply too obvious to ignore. Or perhaps it is because, as one of his fellow executives put it, “Bill Norris can see further in advance than anybody I've ever met.”

Whatever the explanation, anyone who believes that “small is beautiful” and sets about to prove it by first building the world's largest network of computer services; anyone whose entire life—from farm boy to corporate chairman—is the embodiment of what sociologist Max Weber called “the Protestant ethic and the spirit of capitalism” but who insists that we must cooperate with Communist nations; anyone who believes that “the most experienced and effective management resides in the major business corporations of the world” but insists that “without government support . . . there will not be technology to meet

all of society's needs;” anyone who looks to the future and sees the windmill from his past is certainly confronting the paradoxes.

All of this, and more, Bill Norris is doing—every day, as he moves through his tightly controlled schedule of conferences and speeches, and every night, as he pores over the two briefcases of reading matter he lugs home at the end of the afternoon. At 66, Control Data's chairman and chief executive officer shows no sign of slowing down—but he *has* changed direction. And this has made him a lot more visible, if not in the Twin Cities, then certainly around the world.

“I don't know how all that got started,” says Norbert Berg, a Control Data senior vice president and Norris' assistant, referring to Norris' heavy schedule of public appearances which crowded much of his 1977 calendar. “First of all,” Berg explains, “Control Data's businesses are going quite well right now, and Norris has, indeed, backed off substantially from the day-to-day operations of the business. He's got a crew of people under him he's comfortable with and who are good at doing their jobs. The company's strategy is now in place, so he has more time to work on strategy for attacking



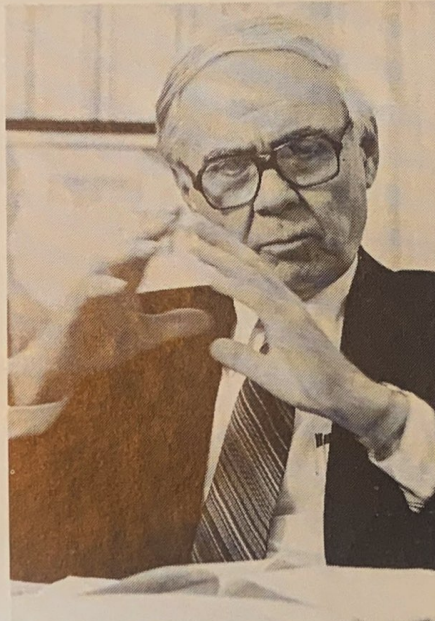
Norris: 'Carter goes to New York City . . .

some of those problems which we think are the major problems of society.'

The "major problems of society" are, in fact, regarded by Norris and his colleagues at Control Data as the biggest source of business opportunity, not only for their company but for business in general. "Business and industry have simply got to get more involved in solving these gigantic social problems," says Norris, ticking off his priorities—energy, employment, food production, education—on his outstretched fingers. "We were talking this morning about revitalization of the inner city," he continues. "Business and industry have got to get more involved in that. [President] Carter goes to New York City, walks into a deserted area, kicks a few of the rocks and cans around, and goes back to Washington. They appropriate \$100 million and put up some buildings, and in 10 years the buildings are almost obsolete, half destroyed. The reason?" he asks impatiently. "The people don't have jobs. They don't have any way of maintaining themselves."

□ For Norris, it "all comes back to jobs," and these must be supplied by business and industry through the application of "appropriate technology," coming from increased research and development efforts on the part of business and government. His sociology is as simple and straightforward as George Bernard Shaw's: "The trouble with the poor is poverty!"

The cooperation between business and government is necessary, Norris argues, because "society gets from



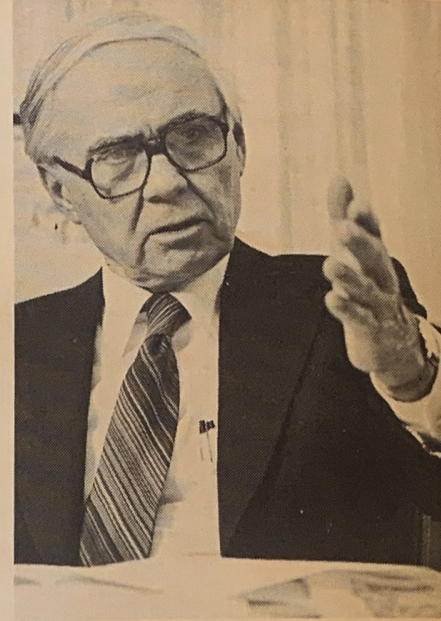
. . . kicks a few rocks and cans around

business only those things which pass the business test," but many of society's needs do not pass that test—at least not immediately. And that is the key to Norris' conviction that social problems *could* be business opportunities.

"I'm talking about needs, not wants," he explains. "You want an automobile. You don't necessarily need one. If industry would provide a decent mass transportation system, you might still want an automobile, but you wouldn't need one."

Government is needed to help identify "real" social needs and attach priorities to them. Government is also needed to bridge the gap between our first recognition of a need and the time when circumstances—general *public* recognition—make it possible for business to meet it. While the contention that we must eventually return to mass transit is one example of this, Control Data is counting heavily on two other areas: education and medicine.

The company has invested millions in developing PLATO, the computer-based education system which it hopes to sell to a wide variety of users, from individuals to large corporations. The system provides individually paced instruction through terminals connected to central computers. "Courseware" developed for PLATO covers the full spectrum of sophistication, from elementary reading and arithmetic to high-energy physics. The system has been used with impressive results in prisons and among poorly motivated and under-achieving students in public schools. (A favorite story at



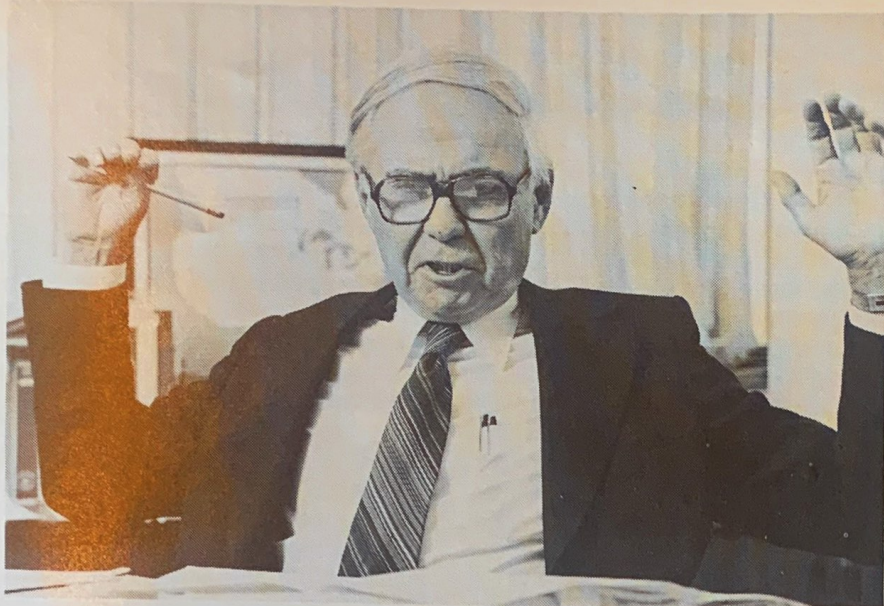
They appropriate \$100 million . . .

Control Data concerns an inner-city school which was broken into repeatedly by students, bent not upon stealing but upon getting extra time with the computer.)

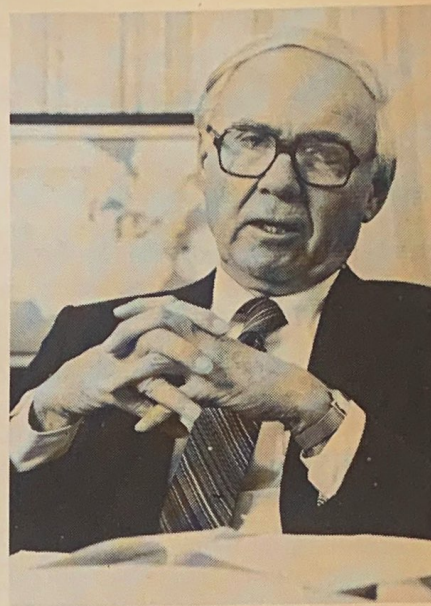
"Twenty years ago the computer was considered the epitome of depersonalization," Norris observes, citing still another contradiction, "but it's actually just the opposite. Through the computer you can be much more personal than ever before." The experience with PLATO requires even the most skeptical to consider this curious possibility.

In the area of medicine, Control Data has been working with the U.S. Department of Agriculture to bring improved health care to residents of the Rosebud Indian Reservation in South Dakota. With the help of computer terminals, medical aids will be led, step-by-step, through diagnosis and treatment of the eight most common ailments found among community residents. For Control Data, the project provides experience which it hopes will lead to wider use of such systems, especially in developing nations.

The Rosebud project also demonstrates that unskilled persons can be trained quickly to become useful contributors in a process involving highly advanced technology. It thus strikes another note in Norris' jobs theme. Control Data's efforts on the employment issue, however, are best illustrated by its commitment to inner-city and depressed-area plant locations. The first such installation was opened in 1968 on Minneapolis' Near North Side, and others followed later



... and in 10 years the buildings are half-destroyed ...



... [because] the people don't have jobs.'

in the Selby-Dale area of St. Paul, in Wolfe County, Ky., Washington, D.C., and northern Manitoba. Ground was broken last month for a second facility in St. Paul's Summit-University area.

In all these cases, Control Data has not been content to assume that workers' problems and personal situations outside the plants were of no concern to the company. Rather, it was recognized that the ability of a worker to perform well on the job is directly related to his or her situation off the job. When it was discovered that absenteeism at the North Side Minneapolis plant was related to the absence of day care for children, Control Data's plant manager—with corporate blessing—helped establish a center, which has since evolved into the Northside Child Development Center and now provides care for 128 youngsters, ages six weeks through 13 years, in the bright, fresh surroundings of a new building. The bindery operation in the Selby-Dale area is completely staffed by part-time people: housewives in the middle of the day and students after three p.m. In the Kentucky plant, 95 per cent of the 300 employees are married women.

Personal needs, however, are not limited to people in economically distressed areas. One of the inevitable problems accompanying organizational growth is alienation. Absenteeism, alcoholism and so-called white-collar crime have all been traced by social researchers to the alienation an employe feels as part of a large bureaucratic organization. In 20 years, Norris has seen his company grow from a

dozen highly involved engineers, operating every day on a first-name, face-to-face basis, into a giant organization with 44,000 employees in 34 countries. His own time is spent in personal, physical isolation from the mass of activities and people that now make up the company. He arrives in the morning, parks his car in the basement garage and rides the elevator to the 14th floor. In the evening, he goes down the elevator, gets into his car and drives home. His personal contacts, according to those around him, are severely limited, in part by the demands of his job but also by his own shyness.

They are quick to explain the shyness, for they worry that it might be interpreted as disinterest or coldness. "He is really concerned for the welfare of other human beings," says Robert Schmidt, executive vice president and chairman of the company's export-strategy committee. Norbert Berg concurs: "People sometimes think he's unresponsive, but, really, what it is is shyness. He likes to deal with people he knows well, feels comfortable with." One executive, no longer with Control Data, observes that Norris "cannot engage in small talk. State your business and be prepared, for he does not suffer fools lightly." Another advises, "When you come to see Bill Norris, get right to the point."

In the language of Norris' own business, only a few terminals are wired directly to the central computer. Once connected, however, it is a different matter. "Bill Norris likes to deal with people who are familiar to him," says Tom Kamp, president of Control Data's

Peripheral Products Co. "He once told us [upper-management people] we should develop 'alter egos' who could fill in for us when we weren't around, but that brought only slight success. If he wants to talk to me, he wants to talk to *me*, not to an assistant." Kamp adds that Norris shows "great loyalty" to people "as long as they do their job."

Among his close associates, Norris is not only loyal but genial. "You can hear him laugh all over this floor," says Norb Berg. "He's got a hearty laugh. Loves a good joke." Robert Schmidt recalls the good humor in Norris' manner on one occasion, when a recently hired executive found Schmidt in the tourist section of an airliner and inquired why he was not traveling first class. "Because," said Bill Norris from across the aisle where he had not been observed by the fledgling executive, "he wanted to ride with me." According to Schmidt's account, there was a great round of laughter—led by Norris. It seems apparent that once Bill Norris takes you seriously, he will laugh with you. Another contradiction, perhaps.

There emerges from such comments the image of a person who highly values human connectedness, but who knows from his own experience that, for some, it is not easily achieved. It is not surprising, therefore, to find him sensitive to the problem of alienation. "There's no doubt," he affirms, "that a large organization—whether it's business or government—provides plenty of alienation. On the other hand, it doesn't have to be that way. Any organization reflects its leader-

Computing Control Data's \$2 billion

In 1976, Control Data Corp. (CDC) became the fifth area company to gross more than \$2 billion, which is a long way from its humble beginning some 20 years ago. Today, CDC is a world leader in large-scale scientific computer systems, and it manufactures one of the industry's broadest lines of peripheral equipment. In computer services or time-sharing, no other company can match CDC's worldwide communication network capabilities.

Through Commercial Credit Co., merged in 1968, CDC provides financial services through more than 1,200 offices. Services include personal loans, installment financing and thrift services, life, health, credit and casualty insurance for consumers, plus commercial financing, equipment leasing and financing, factoring and credit insurance for business.

CDC now has more than 50,000 stockholders, more than 44,000 employees and operations in 34 countries. As has been the case with many major corporations, CDC's growth has been substantially assisted by merger and acquisition. To illustrate: Control Corp. was acquired in 1960, Electrofact N.V. and Becks, Inc., in 1963, Data Display in 1964, TRG, Inc., and Datatrol Corp. in 1965 and C-E-I-R, Inc., in 1967. CDC was actually merged into Commercial Credit in 1968, and the company's name was then changed to Control Data Corp. Also in 1968, CDC acquired Electronic Accounting Card Corp. and Pacific Technology Analysts, Inc. In 1969, Computing Devices of Canada was acquired, and, in 1972, Syntonic Technology.

CDC's position in computer services was greatly enhanced a few years ago when it received Service Bureau Corp., an IBM subsidiary, in the settlement of a lawsuit. Service Bureau and CDC's Cybernet operation have now been combined into a more efficient network.

Although CDC's revenues have climbed fairly consistently, the same cannot be said for profit, particularly in the computer mainframe

business, which, on occasion, has incurred substantial losses. During the five years through 1976, CDC essentially broke even on its computer business, but in the five previous years it lost approximately \$26 million. The bulk of the losses was associated with high-risk projects the company had entered. Despite these problems of profitability, CDC's management has built a computer business with exceptional technical capabilities.

Management strategies in the early years seemed to concentrate on building up revenues, but they now are re-oriented toward improving profitability, and management has stated that in the future they will avoid large high-risk fixed-price contracts. CDC has also been able to reduce exposure from prior years' contracts, and emphasis has been placed on bottom-line results and return on assets employed.

CDC's computer-services revenues were \$250 million in 1976 and are expected to exceed \$300 million in 1977. Gross profit margins have been increasing and are now up three percentage points from 1976 and six points from 1975. Management believes these improvements will continue because of "economies of scale."

CDC was founded on the manufacture of large Electronic Data-Processing (EDP) Systems, an area which has been both good and bad for the company. It has been good in that it has established CDC as a leader in large computer systems and bad in that profitability has been lacking. Since 1974, however, management's objective has been to earn a profit in EDP Systems at the 1974 revenue level, and, in 1977, this goal was realized. A sizable order backlog is in hand. Management is confident that profitability will continue to improve, because manufacturing costs have been reduced, assets employed have been reduced—lowering interest costs—and other expenses have been held in check. The Cyber 170 line is highly successful, and additions being made to this line provide a wide

range of capabilities.

Peripherals have been a good area for CDC. Revenues in 1977 were up about 26 per cent over 1976, and gross margins were up about two per cent. Progress is continuing with a mass storage tape system, and the IBM plug-compatible processor introduced in August has been well received. Disk products represent the strongest area of performance in 1977, with orders up some 69 per cent over 1976. Overall, in OEM peripherals 1977 orders were up about 50 per cent from 1976. CDC is entering 1978 with a peripheral backlog 30 per cent higher than the previous year, which was a record.

The computer business is apparently starting to pay off for CDC. For the first nine months of 1977, net earnings from this segment were up 60.2 per cent to \$14.6 million from \$9.1 million, and it may have contributed \$18 million to \$19 million for all of 1977. Further gains are likely for 1978. The financial-services area, however, in aggregate continues to contribute the bulk of earnings. Earnings from Commercial Credit in the first nine months of 1977 were reported at \$27.7 million versus \$27.6 million the previous year. These results were subsequently restated to include Gulf Insurance, formerly held as a temporary investment, which increased Commercial Credit's nine-month earnings 33.7 per cent to \$33.7 million from \$25.2 million. Commercial Credit acquired Gulf in early 1976 in liquidation of a defaulted loan, and the company had intended to sell it. Since Commercial Credit had been retrenching its own casualty-insurance operations, however, there was a natural fit for Gulf, so management decided to keep the company and consolidate its results.

When originally acquired, Commercial Credit was seen as providing the vast financial resources always needed by a computer company. But Commercial Credit had not been growing rapidly and needed to rejuvenate its own opera-

tions. In the early '70s, problems seemed to compound as inflation rose to double-digit rates and interest costs, as well as loan losses and insurance claims, began to soar. The finance business hit bottom for Commercial Credit in 1974, when earnings were only \$25.8 million, down \$14 million from the 1972 level. Insurance operations bottomed out the following year, showing an \$8.3-million loss in 1975 and a \$2.6-million loss in 1976. The finance business recovered to \$38.7 million in net profit for 1976, however, and Commercial Credit contributed \$36 million to Control Data's consolidated 1976 earnings of \$48.6 million. In 1977, both Commercial Credit and CDC's computer business contributed to increased profit. Management is optimistic that this trend will continue in 1978.

Commercial Credit increased its total debt by \$259 million in the first nine months of 1977, but changed the mix by reducing short-term debt \$127 million, giving it the most favorable short-to-long-term debt ratio in years at .76. Other structural and policy changes have placed Commercial Credit in a much stronger position to control its costs and margins under changing market conditions. The company has many services which are distributed through computer-assisted technology, and its branch system is linked with on-line communications systems. CDC is beginning to capitalize on the synergism of finance and computers.

With its operational and financial house in the best condition in years and with prospects encouraging, CDC initiated its first dividend in history last April, paying 15 cents per share. While modest, it is a start, and future growth of the dividend is likely. Earnings per share for 1977 may be reported in the \$3.80-to-\$3.95 range and between \$4.25 and \$4.50 for 1978. The common stock has recently been trading at about \$26 on the New York Stock Exchange.

— Kenneth W. Johnson, C.F.A., a vice president of Piper, Jaffray & Hopwood, Inc., Minneapolis.

ship, and one characteristic we work very hard at here at Control Data—and I think we've been successful—is to really care about people. We work very hard to help people realize their aspirations and solve their problems.”

One learns early in talking with Bill Norris that such statements are usually more than mere affirmations, for he is clearly dedicated to bringing the polarized worlds of ideas and practice together. Control Data's distressed-area plants give concrete expression to his concern for inner-city jobs. The Rosebud medical system and computer-based education both translate his idea that “social problems should become business opportunities” into practice. It is the same with the problem of alienation and employee morale. The idea that the company should deal with it is put into practice through Employee Advisory Resource (EAR), a project that grew out of the experience in the inner city.

EAR, established in 1974, provides company-paid counselors to hear employees' grievances, especially where the normal grievance procedure has not worked, and to help employees with personal problems. As it has turned out, about 40 per cent of the problems dealt with by EAR have been work-related, and the other 60 per cent have been personal. Employees with personal problems—trouble with an outside company, emotional difficulties, marital discord—are usually referred to outside agencies, but some kinds of problems—financial for example—are handled by the EAR staff.

“There are hundreds of organizations that will help people,” Norris points out, “but, by God, getting the individual connected to the right organization is no little job.”

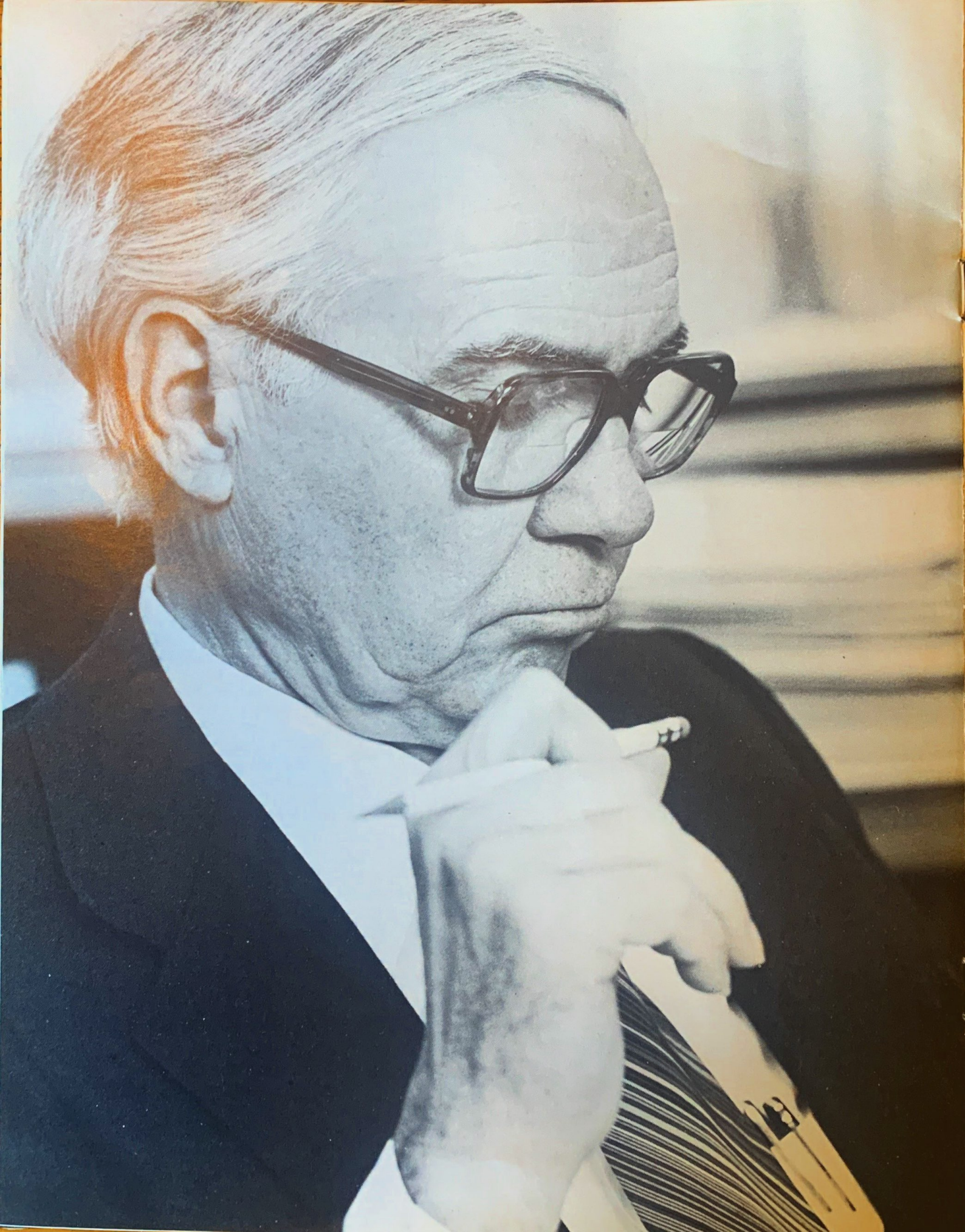
EAR has been so successful—it is now handling more than 3,500 cases a year—that it is being marketed by Control Data to other companies and institutions, thus providing yet another piece of evidence for Norris' claim that “society's problems can be business' opportunities.”

□ EAR, devised to deal with personal problems inside Control Data, bears a strong formal relationship to a more recent, more ambitious project to deal with larger problems on the outside. Technotec is a new Control Data organization, designed to bring individuals, companies and institutions with problems together with individuals, companies and institutions with

solutions. Again, the operating scheme is a translation into practice of one of Bill Norris' high-priority ideas: The world needs more and freer exchange of technology.

Norris criticizes both the proprietary attitudes of private business and the defensiveness of government agencies on this issue. “One of the great untapped resources of the world,” he declared at a recent convention of the United Church of Christ in Grand Rapids, Mich., “is the wealth of information and technology buried in the libraries and laboratories of businesses, government, research institutes, academic institutions and individual inventors.” It remains untapped, Norris contends, because there has been no effective mechanism for transferring it from one place to another. Technotec has been designed to accomplish the transfer by providing central computer storage for technologies from all over the world. The information thus becomes available to anyone with a problem that might be solved if the right technology could just be located. Control Data personnel are currently gleaning technological information for inclusion in the massive data base. Meanwhile, Worldtech, another Control Data organization, is busy trying to locate problems and help the people involved look for a technological solution in the Technotec data base. It is, in a sense, a huge brokerage operation. In June of 1977, Technotec was declared the “Information Product of the Year” by the Information Industry Association from a field of 31 candidates.

Norris' concern for technology exchange, however, is not limited to Technotec and Worldtech. He clearly believes that the problems to be solved transcend arguments about political and economic systems, and for years has advocated—and practiced—greater cooperation with the Communist world. His objective is simply to increase the total amount of technology—which he frequently defines as “know-how”—in the world. Only technology, he believes, gives us a chance to solve our “gigantic” problems. “Many other countries are doing very important things,” he says. “For example, 74 per cent of the technology to prepare cast iron is outside the United States; 77 per cent of the technology to purify molten iron is owned by foreign companies. The technology for hydroelectric power is now more advanced outside the

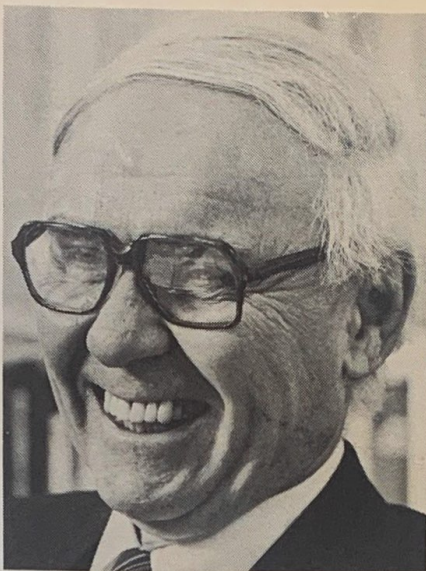


United States than it is here. The French are the leaders in converting solar energy into electric power. The Russians lead in several areas of welding." The examples spill from his tongue like an auctioneer's exhortations.

Control Data has been doing business with the Soviet Union since 1967. It's most recent publicized venture—the sale of a Cyber 76 computer for use by the Soviets in meteorological research—has been stalled by congressional refusal to allow the export license. The incident aptly illustrates the barriers to free exchange of technology which have Norris so exercised, though he points out that government suspicions on this side of the line are not the only frustration. "Our bureaucracy is miniscule compared to the Soviets," he says, "and that isn't to say ours isn't pretty large. Ours is large, theirs is gigantic." The Soviets are fully as aware of the problem as we are, Norris states, and the problem concerns them very much. "Doing business with the Communists is the most frustrating thing there is—on both sides.

"Officials pretty high up in the Soviet hierarchy would like to have what we have," Norris continues, "but they're not going to beg for it. And anything that appears like that gets turned off. We have a program underway—putting on seminars to spread the word about the attractive technology that there is in Russia. We got the program pretty well underway, had the plans, and suddenly it didn't go anywhere. It took us six months to figure out that some of their top officials thought that it was 'begging'. It really wasn't that at all, and when they understood that, it was fine, and they turned it back on."

Norris says the seminars are held in several cities in the United States and feature Soviet scientists and technicians who are paid by Control Data to explain their technology to Americans who pay to attend. "We're in business," he says. "We're not a non-profit organization—though we were for several years," he interjects with a chuckle. "And they understand profit as well as we do. When the whole thing started slowing down, we couldn't figure out why. They want to export. This was a chance to export, but for some reason . . ." His voice trails off, and he looks toward the window: "I'll tell you this matter of communication between two opposite cultures is something."



'We'll have to get that into our power grid.'

□ Norris' interest in the Soviet Union, then, is not limited to selling computers, though he would obviously like to continue doing that. His primary objective is a free market in technology, and he is especially interested in what the Soviets have done in agriculture. "The Soviet Union has done more agricultural research than the United States, a lot more," he says, "so there should be some interesting technology there."

His curiosity about agricultural technology is related, in turn, to the notion of "appropriate technology," an idea he shares with E.F. Schumacher, author of *Small Is Beautiful*, a book high on Norris' list of "good work." Norris is convinced that the problems faced by all countries today require basically new or different technological approaches which come to grips with the reality that we are running out of fossil fuel. The major problems of the developing nations, Norris contends, are agricultural. "A lot of these countries made a mistake in trying to industrialize," he says, "setting up steel mills, for example. I think they recognize that's the wrong approach, and they're going back more to agriculture. Their needs are in agriculture, and I believe that if the United States would carry through a broad-based program of cooperation with these developing countries—meeting their needs—there would be an enormous opportunity to develop appropriate technology that will be useful to them *as well as to us*."

The emphasis is crucial, for it leads Norris to one of his most firmly held ideas about the future. He states it succinctly: "We've reached the point of diminishing returns with capital-

intensive, fossil-fuel agriculture. I'm absolutely certain that the small unit—not only in farming and food processing—has got to come." Some suggest that Norris' predictions of a return to the small farm are a lapse of his normal, hard-nosed reasoning powers, a reversion to romantic solutions stemming from nostalgia for his boyhood farmstead in Nebraska. Norris' retort is predictably forthright: "I've got a hell of a lot more arguments on my side than the other guys have. For example, the average farmer today is going broke. His costs are more than his selling price. Sure, you can raise the prices, but every consumer I know about is having a hell of a time affording the food at its present cost, so if you keep raising the prices it's just going to put more of a squeeze on the average person, and, God knows, he's getting squeezed aplenty. So how's the farmer going to make some money? He's going to have to change the way he's doing things. How's he going to do that? He's going to have to do it by going to a different approach. He's got to get away from that expensive, so-called capital-intensive, fossil-fuel agriculture. Everything is just *pushing* him that way, and the average guy can't even see it."

Pressed for greater specificity, Norris describes a chicken farm in Georgia, where the owner converts the manure from the chickens into feed for his cattle and methane gas to power his tractors and heat his buildings. Solar reflectors on top of the chicken house add to his energy supply. "He's got a highly integrated [operation] there and a lot of labor in it," Norris observes. "Not back-breaking labor, not chasing a mule around 40 acres, but managing the whole thing. [It's] much more integrative, a much more intensive use of the aggregate resources."

Norris' own energy use mounts as he pounds home his points. "The number of small farms is increasing in New England. Take the example of hydroponics—growing vegetables with just water and artificial nutrients. There's a very cheap way of doing that now, and some guy can take a hillside that you can't grow anything on and put a hydroponic system there and just grow tomatoes to beat hell. You can just go on and on," he says. And does: "The Russians are using abandoned coal mines to grow vegetables. Down there the temperature is pretty constant, and it's got lots of advantages. They use ultraviolet light,

and that takes a little energy, but you can put solar collectors on top.

"And speaking of solar energy, it lends itself to small, decentralized uses—crop drying and that sort of thing. And there's tremendous potential in wind power. When I was a kid on the farm in Nebraska, we pumped a hell of a lot of water and generated a lot of electricity with the wind. Yes sir, we're going to have to start using that," he says with a fling of his hand toward the dwarfed windmill 14 floors below. "We'll have to get that into our power grid." He chuckles, closing out his argument by saying that Technotec's technology hunters have been instructed to pay particular attention to four things: agriculture, solar energy, appropriate technology and electronics.

Small farming units are not the only small operations Norris sees in the uncertain future. He is convinced that special nurture must be given to small business enterprises of all kinds, primarily because they are more innovative, more capable of applying the "appropriate technology" he so earnestly espouses. Putting this idea into practice, Control Data has recently bankrolled a national magazine for small business and has set up a venture capital firm—Control Data Capital Corp.—to help small businesses secure financial assistance.

In a practice of longer standing, the company has entered into numerous joint ventures with small companies. In Norris' view, the joint venture is a way for Control Data to avoid at least some of the fall-off in innovation that accompanies huge size. Many such ventures have ultimately resulted in outright acquisition of the smaller company by Control Data, but Norris says this is usually not his preference. "I much prefer to work out an arrangement with a small company," he explains, "because as soon as you buy it, it becomes part of your blob, and the innovativeness decreases. If they're kept out there and you help them—provide what they need—they can be even more innovative." What the small companies need is usually financing and technology—know-how. Control Data can now offer these even to companies not involved in joint ventures through the new venture capital organization and through PLATO, which offers courses on management and other business topics. Courses set for introduction in 1978 include several tailored to women in management.

The courses for women in management may or may not be related to the three pictures that look over Bill Norris' shoulder from the credenza behind his desk. The women in the photos are Control Data vice presidents. Asked what he looks for in a vice president, Norris produces a check list entitled "performance factors" and hands it across his desk. "Number 12 is the big item," he says, "but they left out the most important thing, so we have to change it." Penciled in above "effort/persistence" is "urgency/persistence/extra effort."

"A sense of urgency, that's what I look for," says Norris without hesitation. "A guy comes in here and tells me he's going to do something tomorrow that he really could do today—he's not going to be a vice president."

For Norris, a vice presidency is not the creature of a rational table of organization, but a reward for excellence—and, of course, for "urgency, persistence and extra effort." A vice presidency, he says, is "a way of providing recognition to a person, to say, 'What you are doing is very important.' There are quite a few companies with only a few vice presidencies. I think that's cruel," he asserts with unexpected emotion, "because people like to be vice presidents."

Too many vice presidents, of course, would be "inflationary," and Norris allows that this puts a limit on the number that can be passed out. "You have to have very high criteria," he says. "The job has to involve more than a project; it must include a span of surveillance, a span of participation that goes beyond a single project." The relatively large number of non-administrative vice presidents at Control Data is also related to the nature of the company's business. Highly technical and highly integrated, it lends itself to a proliferation of staff—or consulting—positions. "I suppose if we were just making fur-lined toilet seats," Norris quips, "we wouldn't need any staff."

□ Of all the conundrums Bill Norris wrestles with every day in that 14th-floor office overlooking the windmill, none is more intriguing than Bill Norris himself. In a world of computer-rigid analysis, he devotes his heaviest thinking to synthesis. As the head of a corporate giant founded upon the most advanced technology of our time, he prophesies small farms. As a businessman, he built a \$2-billion

company that didn't pay a dividend until this year. An inheritor and defender of capitalist values, he proposes increased cooperation with the Communists. Unrelenting in his insistence upon excellence in performance, he is responsive to individual hardship.

It is scarcely any wonder that those who have worked with him vary widely in their assessments. On being informed that Norris had been chosen Executive of the Year by the editors of *Corporate Report*, one former colleague remarked, "You could not have picked a more deserving person." Another called him "a lousy businessman" and said the choice was "laughable." "I'd do anything for him," said one man, unapologetically. "I think he's an SOB," said another, equally unapologetically.

Observers have proposed two general explanations of entrepreneurial behavior. One suggests that marginal social status in early life generates feelings of inadequacy or unacceptance which are compensated for with super achievements later. The other explanation ties entrepreneurial achievement to a deep sense of social obligation and a value system—the Protestant ethic, if you will—which renounces idleness and luxury, and espouses self-control and hard work. Thinking about Bill Norris carrying those two briefcases down the elevator to his 10-year-old car for the ride to the home he has occupied since Control Data was simply an idea leaves little room for doubt about which explanation best fits this year's Executive of the Year. ■

Reprinted by permission of
Corporate Report Magazine.