Confusion vs. Conformity

Pat O'Brien's December article on the problems of the "transfer student" in-
spired a flood of mail, mostly from
parents and teachers who share her
concern over the differences in school
curricula between provinces. But a
couple of dissenters sounded war-
nings, worth reporting here.

From Chilliwack, B.C., H. C. Har-
greaves writes, "Do you think it is
some kind of stuffiness that makes
most teachers agree on variety and
flexibility as basic to vitality in schools?
Don't you think we look at many kinds of
school systems in many lands and
at least try to assess these systems by
their results?" What we need, he adds,
is more research. "You'd be appalled
at how little is really substantiated
about the complex and generally
taken-for-granted business of learn-
ing and teaching."

From Ponoka, Alta., H. H. Larson
warns that "efficiency has often led to
stiffness" and this is a danger in standard-
ization of curricula. "The search for
truth is a personal sort of thing,
stemming from a natural human de-
sire to learn and know truth," he says.
"One cannot legislate this desire . . .
if anything, we in Canada need less
centralization of curricula, not more.
The first province that gives up its
central authority to local school sys-
tems in such matters will make the
greater progress. Certainly as Cana-
dians we should be overflowing with
humility when we examine carefully
our almost complete dependence on
the United States for new ideas, new
truths and new almost everything. A
swing to more local and grass root
control is our only hope toward attain-
ing the independence we so sorely
need to keep democracy strong.

Our cover: You can find sculpture in
the most unlikely places. While ex-
ploring the insides of a computer for
material to illustrate our stories (pp.
12-20) designer Ken Rodwell was
intrigued by the symmetry of an elec-
tric circuit. Roy Nichols applied some
photographic magic and behold! A
cover.

In This Issue
2 Wildcat Road by Bob Fenner
7 Oh, this is the place where
Newfoundlanders gather
by Gordon Westley
12 Please Do Not Talk to
the Machines by Thelma Dickman
17 The Men Who Do Talk to
the Machines by Jack Fell
18 How the Machines Talk
21 Le Bon Dieu en Taxi
by Phyllis
26 Aisle Seat for the Shareholders
by Michael Jacob
Photo Credit/pages 2-6, Harry Rowed;
pages 21-25, Paul Gallines. All others by
Imperial Oil staff photographers.

Imperial Oil Review

"Look Alive. You Can Be Replaced By A Button." This sign, we are told, rests on the desk of a Buffalo, N.Y. business consultant who specializes in research on the use of computers. At first we thought it pretty funny; on second thought, it's rather sobering. Can we be replaced by computers? Certainly the jobs of many of us will eventually be altered by these machines.

They are only machines, the experts assure us. There is no indication that they will ever be able to function without people. They can do only what they are told and even then, sometimes, they commit silly machine-like errors. In Britain a computer called "Ernie" (Electronic Rando Number Indicator Equipment) used to pick winning numbers in the monthly draw for government premium bonds. One day Ernie went to Scotland for a draw. An Edinburgh pipe band started to skirl and Ernie tried to switch himself—excuse us, itself—off. Seems the pipers struck a note identical to the sound produced within Ernie's starting button was pressed.

Nevertheless, the "dumb" machines are steadily taking over jobs once held exclusively by men (see page 12). Now there's even one that can produce an outline for a novel, if programmed with the letters of the alphabet and the 36 basic dramatic situations of fiction. Prior to 1957 there were only seven digital computers in Canada. Today there are over 300; by 1965 there may be 500. Imperial Oil alone uses eight computers of various types across Canada.

Yet all of these machines need men, a great many men. When computers arrive, certain existing jobs and job holders are disrupted. It does not necessarily mean that those people are thrown out of work. It does mean that they have to adapt and change.

For one thing, computers make new jobs. Across Canada they have created an estimated 3,000–4,000 full-time jobs; and in addition another 500–1,000 jobs in firms that make, sell, and service machines. Within Imperial computers have created some 125 new jobs, most of which were filled by employees recruited from various company departments.

Hundreds more people have upgraded their jobs for the new skills required. For instance, some 300 employees throughout Imperial now work full time as programmers, operators, data handlers, systems analysts, key punch operators and mathematicians. Another 250 clerical men and women have been trained for the change from simple tabulation of figures to the preparation of statistics for computers and analysis of results.

Transitions of this kind are not easy, particularly for older employees, especi-
ally if moves to new locations are involved. But computers are part of the move toward progress and efficiency. If Canada is to meet the competition of countries with lower wage scales and standards of living, the economists say, we must trim production costs, using all the tools at our disposal. Computers are part of the toolbox.

So the question is not: should we have computers? They are here to stay. Rather, the question is: what are companies doing to give employees an opportunity to adapt to the new situations? Some companies, Imperial for one, are doing a great deal. Machines become obsolete. Employees need not.
WILDCAT ROAD

by Bob Fennner

It was still dawn, red line along the eastern hills when we began the long, steep descent to the Fort Nelson river. Walter "Red" George, a man responsible for the operation (beginning this January morning, had wisely observed): "Tomorrow will not be a day to look forward to." Getting the 18-ton load riding behind him atop approaching, snow-covered slope could well be the first of many things that would make that prophecy come true.

We were on our way to a newly-cleared square of ground in the northeastern British Columbia wilderness about 50 miles below the Northwest Territories border, where Imperial would drill a wildcat, or exploratory well, christened "Vicount No. 1". To get there the company had pushed a road out from mile 317 on the Alaska Highway, just north of Fort Nelson.

The road ran for 86 miles across a land where few areas had ever walked; where the massive alluvium was broken only by the foamy creak of white poplar rubbing together; where usually only wild animal tracks scarred the white perfection of the drifted snow. Now the first convoy, loaded with trailers, electric generating equipment and other paraphernalia needed to build a "small town" was grinding through the gray-black of early dawn.

We started up the far bank, rapidly losing momentum. Red George constantly re-arranged the gears, double clutching more smoothly than the average motorist flicks an automatic transmission lever. For what seemed an eternity, we hung at the top of the climb, then slowly dropped over. George allowed himself a quick grin. "We beat the..." he muttered.

Not all of the convoy did. Two hours later seven trucks strung out in a crooked line at the bottom of the hill. As spindly wheels screamed runs in frozen ground, harried drivers slung chains and matter of factly cursed cold and snow and, by inference, the business of drilling a wildcat well in a tough, remote corner of the world.

Imperial has been conducting an off and on search for crude oil and natural gas in northeastern B.C. since the 1970s. The most recent exploration effort began in the mid-50s. Some discoveries have been made. Vicount No. 1 would be another wildcat in that search.

Wildcatting is the world's biggest poker game. By the time Vicount is completed next summer she will have cost about $900,000; a second wildcat, Dosillator, to be drilled 30 miles northwest of Vicount, will cost about the same amount: that is if all goes well. A few delays and the cost of either could easily reach $1,000,000.

The odds are against the wells being successful. Only one wildcat in 70 finds oil in commercial quantities (a field of at least 1,000,000 barrels). Why then the gamble? When, at the moment, the Canadian oil industry is producing at only 55 percent of its potential? Imperial believes that unless more oil is found in greater quantity than before, by 1970 present markets will be using nearly all the oil we can produce. Because it takes six to eight years to bring any new exploration play into production, the company believes that explore to build up reserves for 1970 should be done now.

Which was why. Red George and the others of the convoy were toiling over Imperial's homemade road last January. Actually this chapter in the story of Vicount No. 1 had begun one day last fall when Imperial's Otter airplane dropped low over the B.C. bush and surveyed Tom Watmore sized up the situation below, looking for a water source (Vicount will use up to 30,000 gallons a day), a place to locate camp and aircraft runway: the best route for the road. A family of beavers had obligingly built a dam which would probably serve sufficient water. An earlier Imperial road ran part way from mile 317; a rough track cut by a scenic party running the rest of the way could be widened and graded. The airfield turned southwest toward Dawson Creek.

Late autumn came, and the northeasterner B.C. skies plugged the road and seismic line with snow. At Imperial's Peace river producing division headquarters in Dawson Creek, the staff watched the weather. Vicount would be located in suddie country, as nothing could move until freeze-up. But once the mud had frozen, the operation would be a race against time to move 1,000 tons of equipment, drill pipe (enough for a hole 2 miles deep) and mud—the drillers' special kind of mud—to the site before spring breakup when thebottom would go out of the masking and the rig's only outside contact would be by light aircraft and radio.

Early in January, working from earlier bench marks, Watmore began surveying the exact location for the well and camp. Two caterpillar tractors, with living trailers for the operators, moved behind them, began opening the road. The Fort Nelson road had to be cleared so an ice bridge was built by spraying the existing ice with successive layers of water. On the first test a "cat" broke through into nine feet of water. Cat drivers, accompanied to roam the wasteland, aware for a while, then whisked the doomed "cat" out of the river.

On the fourth work in January work started on opening the clearing for the site. Trucks loaded with equipment began the 700-mile grind from Edmonton to Fort Nelson. Toolpusher George Jackson, a mild mannered, soft spoken veteran of 27 years and more than 60 wildcats arrived at Fort Nelson with his crew. Gear that had been stockpiled there a year earlier lay buried under two and a half feet of snow. The temperature nudged 30 degrees below zero.

At 30 below men often had to change truck tires bare-handed. Glasses humped south.

Imperial Oil Review, April 1963
Bulldozers opened up frozen ground which exposed steaming earth to the sub-zero air. Five feet of frost was encountered.

At 30 below, truck exhaust seems to freeze in stringy white lines against the sky. Metal becomes as brittle as glass, so that a smart tap from a ball peen hammer will shear a piece of two-inch pipe. Some cold weather experts estimate that a man's efficiency drops two percent for each degree below zero. George Jackson's roughnecks put on their warmest clothes and dug out the equipment from the Fort Nelson stockpile with "cat" and hand shovel. "Just keep telling yourself it's warm," a tall youthful roughneck philosophized.

The following morning, assistant toolpusher George Fyle drove the road. His report was brief: "She's no hell but I think we can make it." Jackson weighed the odds. "We'll try to break through tomorrow. I want everybody out of town by 6 a.m."

So on the fourth Saturday in January the first convoy rolled, down switchbacks on steep hillsides where newly scraped earth showed raw and frozen against the snow; laboriously doggedly uphill again; getting stuck, getting out, drivers' bones being jarred by a road that would need many more gradings before it would even come close to being smooth. Their average speed was 15 miles per hour; any faster and a truck would be shaken to pieces, or a load upset.

Days earlier, I had thought the Alaska Highway was rough enough. Now, sitting in the cab beside Red George, I remembered it as a kind of super-highway, compared to this trail.

After the last 30 miles George said, "If I wasn't too big and too old, I'd have cried. When I show regular highway truckers snapshots of these roads they say they'd go on the broadside before they'd drive up here."

On Saturday night Jackson and his 20-man crew—which included roughnecks, drillers, a mechanic, an electrician and cooks—lived in trailers. On Sunday they began setting up the main camp—mainly green colored buildings made of foamed styrene insulation sandwiched between layers of plywood, which house six men, two to a room. The water supply had yet to be connected so they washed in snow. The temperature continued to hang around 20 below.

On Tuesday the camp was completed. A 2,600 foot...
runway began to stretch out into the bush along the pre-
vailing wind. The crew began the first step in erecting the rig—digging a "cellar" 10 feet square by 9 feet deep. An 
air hammer brought in to help crack through five feet of 
frost ran 10 minutes and quit. Jackson made several spe-
cific promises about what would happen to anyone re-
motely connected with stealing him that air hammer, and 
the roughnecks went to work with pick and shovel. The 
temperature still hovered between 20 and 30 below, stirred 
by a mild breeze. A truck wheel, its metallic strength 

sapped by cold, snapped. A mechanic, summoned by ra-
dio, started out from Edmonton to repair it.

The trucks were running almost around the clock, lin-
ing the sides of the clearing with everything from 21-toe 
diesel motors to stacks of lumber which would eventually 
become part of the rig. Caterpillar tractor engines roared 
and whined on into the night and the harsh glare of elec-
tric lights lit up the bush.

In their off hours the crew read or played cards. Late 
an empty trailer would be converted into a recreation 
hall. Mud man Don Lyons looked forward to breakup 
when, during his off-time, he could pan for gold up where 
the Liard joins the Fort Nelson.

Late Wednesday night a 12-hour snowfall began. Jack-
son discovered that the radio would receive but not trans-
mit. The temperature climbed to 30 above, held there 
through Thursday, then overnight plunged to 40 below. 
Early Friday afternoon the first phase of the job was 
over. Eighty-four loads had moved over the road. About 
120 additional loads—mainly drill stem, mud and 110,000 
gallons of diesel fuel—would still have to be hauled, but 
the camp and rig moving job was finished.

On Saturday the trucks began the long trek to Edmon-
ton where they would get a mechanical checkup and pick 
up more equipment. Transportation foreman Bob Hey-


land began making plans to move to Dunedin—the 
other well. 

And in the late afternoon sunset, Viscount No. 1, which 
would soon tower 145 feet over the lath, was beginning to 
take shape, getting ready to begin the search for the 
only remains of one of the most happens to all that 
never ceases to amazed at a commen-

silence. 

by Gordon Wesley

I

In early 1949, when final negotia-
tions were being worked out for New-
foundland's entry into Confederation, 
the Canadian Broadcasting Corpora-
tion found itself faced with an embar-
rassing problem: the most popular 
news broadcast on the island, the 
twice-daily Doyle Bulletin, was a 
sponsored program advertising the 
foods, drugs, cosmetics, cleaners and 
other products distributed by its pro-
moter and founder, Gerald Stanley 
Doyle, of St. John's. How could the 
August CBC, which had never before 
allowed commercialism to sully the 
purity of its public information pro-
grams, delete the Doyle Bulletin with-
out offending its 300,000-old 
readers?

The answer was, of course, that it 
couldn't; and the CBC admitted as 
much. But it went even further. As a 
special concession the CBC granted 
the Doyle Bulletin the status of a re-
verted local institution and allowed it 
to continue unencumbered at a commer-
cial rate somewhat below normal 
charges for that type of program.

"What else could they do?" says 
Doug Brophy, well-known CBC broad-
caster of St. John's. "They prob-
ably knew the islanders might 
call off Confederation if they couldn't 
have their beloved Bulletin intact."

Today, 31 years after its inaugura-
tion in 1932, the Doyle Bulletin—or "Dile" News, as most Newfound-


landers pronounce it—is still a re-
vered institution eagerly awaited each 
Saturday, even though 75 percent of 
the islanders have electricity and can 
now also receive television. Partly 
this loyalty stems from long habit; 
the program is as much a part of island 
life as drinking tea or worrying about 
fishing prospects. But mainly it is be-
cause the Bulletin is the distilled es-
ence of everything of interest to Newfoundlanders, from foreign af-
fairs, local politics and job prospects 
 juice gossip, the progress of in-
valids, missing persons, social notes, 
charity drives—in short, what every-
one is doing, and why.

Sandwiched in between such typi-

cal news items as the landing of a 21-
pound salmon off Shellford Island 
in "an average time, just over a pound 
a minute" and the report that Mr. X 
of Carlonear will not be able to get 
home tonight because of "social com-
mitten's," are the commercials for 
products for which the Gerald S. Doyle 
Company holds the Newfoundland 
franchise. These include brand-name 
products which no home would be 
without—jams, pills, lotions, shoe pol-
ishes, teas and coffees, bathroom aids, 
confections-plus the products pack-
aged by the Doyle company itself, all 
of them "in the familiar little blue 
bottles." Among the latter are such 
home staples as cob liver oil, fritter's 
balsam and oil of wintergreen, to help 
serve off the ills stemming from 
the island's damp weather.

None of this advertising however, is 
based on the hard sell. Listeners, in-
stead, are genuinely reminded that they 
can pick up these commodities at 
their local store and sponsorship is
the Doyle company's only participation, it has no hand in the content or preparation of the Bulletin.

Since the death of founder Gerald S. Doyle in 1956, at the age of 62, the parent company has been ably managed by his eldest son, Tom, 32. The founder's charming, Argentia-born widow, Mary Doyle, who acted as his secretary before their marriage, is president of the company.

At present, Doyle Bulletins are broadcast simultaneously daily from two different island centres—St. John's and Corner Brook—with Charlie Bursey and Ed Byrne as their respective editors and local CBC announcers as readers. The only difference between the 1 p.m. edition and the evening edition at 7:45 is that the former is 15 minutes long, the latter is half hour.

Each half-hour edition starts off with a commercial, followed by a period of spot news gathered either by Charlie or Ed or by their 400-old volunteer local correspondents scattered across the island, who work just for the love of it. Then come the death announcements. Then comes another commercial. The marine weather forecast follows, then the report on the positions and probable cargoes of the 13 CNR coastal boats and other small private freighters which still carry supplies to the outports. Then comes the personal message section, in which people all over the island may send greetings or important messages to any other part of the island. These are followed by the social notes about weddings, engagements, parties or rallies all over the province.

Third last on the program are the reports by Red Cross and other agencies on the progress of hospital patients in St. John's or Corner Brook. Then comes a section probably unheard of in other Canadian news—"a brief list of items for sale or trade," as he's "giving up honest toil" or Jack Fitzgerald of Harc Bay has some traps for outright sale, as he's taking off for "Upper Canada."

"A brief list of items for sale or trade"

The Bulletin its honey flavor and humor—sometimes count in by wire, too, but the senders pay the cost of mailing.

Most of these messages are simple instructions such as "Your shift on clock starts at eight o'clock," possibly a hint to a moose-hunting husband to remember that he also has a wife and family. Or they may be cryptic love notes like "Thinking of you today, your lucky number 26." Others are personal reports on invalids, such as "Saw Diane yesterday. She is doing well. Will be having stitches out soon."

Others, however, have a more purposeful intent, such as the mendacious message sent out by a jilted south coast maiden informing the whole island, and particularly all unwary females, that her "bachelor ex-boy friend was really a married man with several children. Or the sad tale of the husband delayed in the city on a furniture-buying expedition, who informed his wife that he would be "home tomorrow. Hung up on kitchen stove."" Still another reported that the accident victim he has been visiting was still "under the doctor's care."

Unless the error is a serious one, involving an obscenity or a loss of real meaning, the editor, with tongue deftly tucked in check, will let it go exactly as written. Even messages which might conceivably result in slander suits are relayed intact, since the editors—with an average of 60 to 80 messages to broadcast each issue—have no time to check out the accuracy of the information. Indeed, it is this very speed, plus the vast size of the listening audience, which causes so many islanders to use the Bulletin instead of regular communication channels. Every day, for example, the St. John's office of the Bulletin actually receives messages for people living in St. John's, the senders obviously believing that a message via the Bulletin will reach the recipient more quickly than by any other method.

On rare occasions, if the pressure is mounting or a message coming in over the telephone is garbled, mistakes may be made in the Bulletin office itself, which is located in a wing of the Gerald S. Doyle packaging plant on St. John's west side. Once, having reported each week for almost a year that an ailing old man in Tickle Harbor was still keeping up "Even the most frugal will not consider going to bed at night without tuning in to the 'Dile' News"
the good fight, the Bulletin went on the air without checking, to report that he was still "resting comfortably." At that very moment, the old man was already in his coffin, with the guests at his wake surging around the boat.

But in another case, an elderly woman in hospital who had been unable to find out from her own doctor how she was progressing, was relieved, on tuning in to the Bulletin, to find that— as she had hoped— she was "coming along nicely."

Although most of the island is today within reach of television and newspapers, electricity has not yet penetrated many sections. These residents must depend on battery-operated radio for their news. Batteries cost $10 to $12 a set, so that many families can afford only one set each year. Stretching these over a whole year is an island art, but even the most frugal will not consider going to bed at night without tuning in to the "Dile" News.

It was even more so in the hungry Thirties, which hit the island far harder than any part of Canada. For several years when the price of fish was at rock bottom, whole families had to live on a government dole of six cents per day per person. In those desperate days, radio was the only comfort, the only way people in the outports could keep in touch with other sufferers. It was at this time that Gerald Doyle, a lean, rangy six-footer with a true island brogue and a compelling personality which infected all he met, decided that an island-style news broadcast would help dispel the loneliness and despair. Within weeks after its inauguration in November, 1932, the Bulletin he worked out—on lines still followed today—was as widely followed and almost as well trusted as the family Bible.

Quick to follow up his advantage, Doyle sought by all means to increase the respect. When heavy storms at sea delayed fishing fleets, he encouraged skippers to relay messages to him via ship's radio and would often go on the air late at night with a special issue of the Bulletin. When supply vessels could not reach some outports owing to ice, bad weather, or breakdown, he again put out extra bulletins. The simple statement that "all aboard the Ranger are well" or "6,000 seal pelts stowed down on the Molly Dee, expecting to make home port Friday" or "frightener Julie expects make Badgers Quay tomorrow" could send thousands of islanders to bed weeping with joy and thankfulness.

It was during this period too that Gerald Doyle first began bringing a personal touch to his work each summer—and helping connect island unity—by circumnavigating the island in his private yacht, Miss Newfoundland. At every hamlet his arrival was the signal for a big village party, with the scraping of fiddles, the inevitable happy hoedowns and the singing of the old songs.

Doyle began collecting and publishing these distinctive folk songs in

book form under the title of "Old Time Songs of Newfoundland." Three editions have already been published and given away free to all who request them. Doyle also financed the recording debuts of many local singers and instrumentalists.

"He was a most unusual man and a staunch booster of Newfoundland, as well as being without peer in his particular brand of merchandising," says W. F. Galgay, Regional Supervisor for the CBC in Newfoundland.

"He certainly left our island a far better place than he found it."

It was to Galgay that Doyle came with his original idea for the program back in 1932, when the former was manager of the old Dominion Broadcasting Company. "Before I knew it, he'd talked me into not only reading the Bulletin but also in editing and producing it," laughs Galgay. "He was certainly a marvellous salesman."

Following Galgay was a St. John's younger named Tom Moakler, then Mike Mulcahy, an ex-newsman, Jim Quinley, now with the federal department of fisheries, and Charlie Bursey.

For 20 years the Bulletin originated in the DBC and then the CBC studios on the top floor of the Newfoundland Hotel. But in 1952 the studios were moved to another structure in downtown St. John's known as the T.A. Building. This brings a chuckle to many former editors and readers of the Bulletin.

"I think if old Gerald ever knew his program was being sent out across the island from the Total Abstinence Building, he would certainly make his protests known somehow," says Jim Quinley. "The only time many of the outport people ever got a drink of really good news was when he would drop in on them."

For this was the life-blood of both Gerald S. Doyle and of his wonderful Bulletin: getting close to the people who were both his best customers and best friends. On his last trip around the island in his sleek new Miss Newfoundland II, perhaps suspecting he might never see them again, he made it a point to drop in at every village, no matter how small, no matter what the hour he happened to be passing.

He was passing the little town of La Perle just after dark one night when he decided to go ashore, and toodled loudly on the ship's horn as a signal that he needed help in guiding his craft in. He tooted and tooted, but still no one came, and no lights shone in the village. Finally, as he was about to risk taking the boat in without a guide, lights suddenly flashed on all over the village and people began thronging the docks to yell to him.

"Sorry you had to wait so long," Doyle heard them shout, "but you came along on a late trip. We were all listening to the Dile News!"

"Doyle's arrival at each hamlet was the signal for a big village party . . ."

"A revered invitation eagerly awaited each day"
About a year ago a joke was going the rounds, concerning the first computer-controlled airplane flight. As the passengers fastened their seat belts and the plane lifted into the air, a recorded voice was heard in the cabin. "Ladies and gentlemen," it said brightly, "this is the world's first fully-automated flight. Everything will be performed automatically. A computer will control our passage from New York to London without any human hand at the controls. Just relax and enjoy yourselves. Absolutely everything has been taken into consideration for your safety, and nothing can possibly go wrong... go wrong... go wrong..."

A lot of people laughed at that joke at the time, but what they don't know is that last summer a plane took off from New York and flew to London, and a computer controlled the flight all the way.

Computers today are doing things that until recently were confined to the pages of science fiction magazines. They can read, type, print, take oral instructions, play music, talk, translate foreign languages and control traffic. Computers advise buyers on future color and style trends in women's fashions, play chess and blackjack, compose music, forecast the results of national elections, and calculate a rocket's path to the moon.

In Japan, a new locomotive travels so fast (124 mph) that human engineers can't control its progress safely; computers direct the trains, with speeds and slowdowns for stops programmed on tape. In a New York city garage, computer controls allow 270 cars to be parked electronically by a woman attendant who never leaves her chair. One computer, stuffed to its electronic gills with statistics and possibilities, advised a real estate operator to erect a shopping centre in an uninhabited tract of supposedly worthless pasture. Before the centre opened, a highway had been built on the surrounding property, and houses were springing up in all directions.

Computers have even been known to crack an occasional corny joke. During 1961's Christmas shopping rush, two U.S. department stores set up computers to help shoppers solve the annual dilemma of what to send Aunt Edith. (Last year in Toronto, Simpson's did the same thing.)

Customers jotted down the age, sex, relationship and hobbies of the recipient, and out popped 10 gift suggestions. One Philadelphia woman asked the U.S. computer what he should buy for a 90-year-old female ski jumper who'd just had twins. After a split-second burp and blink, the machine typed, "This is a very unusual subject. You produce the subject and we'll produce the gift."

The computer was, of course, "programmed" to crack the joke. (For an explanation of programming, see page 47.) However, most of the work computers are programmed to do is serious—and big business.

Since the first practical electronic computer was made in the late 1940s, the industry has grown until, in 1962, the U.S. produced $1,400,000,000 worth of computers. There are between six and nine thousand computers in the U.S., and by 1970 the North American total is expected to be 50,000. Canada doesn't contribute much to the figure yet. We only have 300-400 computers going for us right now, and are some two to three years behind the U.S. in the use of the machines. However, automation experts say that we're starting to come on strong in the field.

Most people, conditioned by cartoons, imagine computers as being a single, large, brooding "electronic brain," owned by a funny little man in a white coat. However, in the various installations I've explored recently in several companies, the scene has been crisply efficient. The most popular computer installation is described as "medium size." This means there are perhaps 10 separate machines in an air-conditioned room (air-conditioned because of the heat generated by the computers and for dust and humidity control). The only noises you hear in the rooms are the clicking of automatic typewriters, the beep-beep-beep of wheels spinning around in the machine, and occasional sounds from a group of technicians in solenoid suits, who are on hand to check the computer's progress through various stages of work.

Listening to these trained computer experts describe the machine's processes is a little like playing bridge for the first time. You simply don't know what they're talking about. (The layman's reactions are decidedly slower than those of a computer, of course. The new machines can print up to 10,000 characters per second, which is less than it takes me to say "Paradox").

*they're much too busy typing, translating, playing chess, operating trains and rockets and doing chores for industry. anyway, computers won't talk to just anybody

Imperial Oil Review, April 1963

by Thelma Dickman
However, after your informant goes around for the second time, you begin to understand that there are two main types of computer. The analog type (mainly used for scientific and engineering purposes) measures speed, motion, heat, pressure and other physical properties, by converting them into electrical impulses. Analog computers show these measurements on graphs, charts or in the form of wiggly lines on a screen.

The digital type of computer (primarily used in industry and offices) is a counter, and interprets a mixture of numbers, letters and symbols, fed in by a typewriter, keyboard, punched card reader, punched tape reader or magnetic tape. It takes in digital numbers as electronic impulses and calculates them so fast that the rapid blanking of tubes is seen as a steady glow.

The newest digital computers can print answers to problems at the speed of 5,000 lines a minute. In fact, this ultra-high speed printing output posed a problem not long ago in a large Toronto computing centre. It seems that the paper unrolling so quickly generated static electricity—and when a clerk reached out to tear off some of the printed data, she suffered a nasty shock. The output printer had to be slowed down temporarily, until an accessory device could be fitted that dammed the static.

Computer experts detest the phrase “electronic brain.” “It’s a machine,” they snap, “it must be programmed to work. It doesn’t think.”

Nevertheless, computers really do work mechanically in much the same way as a human brain. The brain has billions of neurons holding bits of information, stored there by our five senses, and each information neuron is interconnected with every other neuron. In a computer, ferrite cores (little magnetized metal doughnuts), magnetic lines and dots on the revolving discs and drums represent neurons. Bits of data are stored in them by electrical signals originating from the work of human programmers.

The machines have the ability to store prodigious masses of information (Trans-Canada Air Lines has a computer which holds every available seat reservation for a whole year on a memory tape). The machines process it in anbrated into a form in which all the facts come together as a logical conclusion.

For example, Imperial Oil uses a computer for linear programming (economics planning) to study distribution problems in refineries or terminals. Imperial uses several different kinds of transportation to take in crude oil and products to customers—ship, pipeline, rail and truck. By feeding into a computer system these alternatives and their respective costs, advantages, and drawbacks, and also by supplying the computer with several hypothetical examples (in other words, presuming that a certain situation exists, when in fact it’s still on paper), Imperial is able to find out within hours which would be the most practical method of distribution in each case.

Imperial’s large computer also does the payroll for 12,500 employees at 100 cheques a minute, in two to three hours. The same computer maintains a list of shareholders on a main register and automatically calculates dividends for the shareholders. The actual time needed to process dividend calculations for 43,500 shareholders is three hours—the machine then prints 43,500 cheques in 10 hours. Before the computer was installed, the operation took about two weeks.

Of course, it costs Imperial $45,000 rental for 176 hours (one month’s) of “green light” use (hours the machine is in actual operation) for this one computer. The company’s entire computer bill (including staff salaries) is close to $3,000,000 a year.

Rental on a large computer system can run up to $1,500,000 per year, yet more than 80 percent of the U.S. systems in use are rented. There has been such rapid technological development since the first computer was put to work, companies have been unwilling to tie themselves down to a system which might be obsolete before the second payment was made. However, there’s now a market developing in a new way: for used computers, and more companies might decide to buy. A new small-system computer can presently be bought for around $25,000-$30,000, with medium size systems costing $300,000-$700,000 and larger ones from $1,000,000 up.

Trans-Canada Air Lines bought an electronic computer reservations system for $3,500,000. Ferranti-Packard built and installed this system, which can handle up to 10 requests for information per second, or 36,000 per hour.

Somewhere I still can’t believe what I saw recently in TCA’s Toronto reservations room. The operator pencilled a few swift strokes on a card, requesting traveling space, popped it into a small slot on his desk, and almost immediately the card sprang up again, with the information neatly pencilled on the margin. In that split second of time, the clerk’s request for space had traveled from Toronto to Seattle, where another computer confirmed the reservation, suggested alternate flights, and sent the answer back to Toronto. This system is considered the most up-to-date reservations system in operation anywhere in the world.

Besides choosing reservations for airline and railway customers, computers prove their versatility by translating speeches into four languages simultaneously, do the preliminary weeding of prospective astronauts (from the initial masses of applicants) for the U.S. space program, help Toronto brewers adjust their sugars according to programmed thirst needs and keep track of boxcars for the CNR in Montreal. President Kennedy used a computer to analyze the wishes of the voters during his election campaign. The University of Toronto’s computer calculated the water levels along the projected St. Lawrence Seaway, and on its findings the engineers based their waterway design. The university now has a new $3,000,000 computer system which is 300 times as fast as the old one.

Called the 7090 system and made by IBM, this setup will be able to perform in an hour work which would require 25 hours on a 705, or five hours on a 704. Imperial Oil will be renting some time on this computer to process engineering and scientific projects.

Magnetic tape units are the reading and writing machines of the computer system. Information previously recorded on tapes is fed into them to be played to the computers. The computers then act on this information to update it or to produce answers to problems posed by it.

The console of Imperial’s 705 computer is the nerve centre of the machine. From it one operator controls the whole system. The keys are similar to those on a typewriter or adding machine.

At Imperial’s library of magnetic tapes, data and computer programs are stored ready for future use. These tapes tell the computer information or methods of working which have already been compiled.
The 705 computer is the biggest data processing machine Imperial operates. It writes 100 pay cheques a minute, automatically calculates dividends, for shareholders and makes decisions in marketing, refining and production. The bill—including staff salaries—for the company’s computers runs to about $3 million a year.

This fall, Toronto city bought a $1,960,000 electronic computer which will automatically control more than 500 traffic lights on its tangled traffic arteries. (In large cities such as Montreal or Toronto, it has been estimated that such a computer could reduce traffic delays by as much as 5,000 vehicle hours per day, and save motorists over two million dollars a year in running costs—and nervous disorders.)

In New York city, Dr. Eric Riss has been making people electronically since 1956. Dr. Riss has a long talk with a prospective husband, then feeds the information into an IBM machine, which reaches back into a memory file of 3,000 people. Within two weeks it comes up with Miss Right. The co-ordinated computer courtship has been responsible for 500 marriages since 1956, with only one divorce (as opposed to the national average of one divorce in four marriages).

There's even a computer to help you practice your golf game. A budding Sam Snead uses lightweight practice balls and the computer's lighted panel registers every 10 yards of his drive. The actual practice area being only 9 x 12 feet, this helpful bit of equipment can be tucked away in a basement, where it will blink discreetly every time you hook the ball.

However, in the weird world of electronic computer development, to quote Al Jolson, "You ain't seen nothin' yet". Burroughs Business Machines have recently developed a computer the size of a loaf of bread, capable of performing calculations at the speeds of room-size computers (although not the variety of calculations).

IBM now has a computer developed, but not for sale yet, that can perform at the speed of a human voice. Professor Jack Nesbitt, head of the University of Manitoba dairy science department, says that eventually the supermarket will become obsolete. "Some day," he predicts, "the housewife will punch out her shopping list on a card and insert it into a special telephone slot. Computer-controlled orders will be relayed to a warehouse, where they will be packed and delivered to the home."

Maybe even home-cooking will be obsolete. It has been predicted that soon the tired housewife on her way home, waiting for the computer-controlled red light to change, will dictate his favorite meal into his car telephone. The phone will submit the order to computer-type controls in the home, select the food, and sequence its cooking and serving.

By Century 21, currency may be used only for incidental tasks. It's quite probable that, instead of a pay cheque, your employer's computer will automatically credit your salary to a central account. Purchases at stores, restaurants, theatres, will be automatically debited to your account at the instant of purchase.

On the electronic highways of the future you will be able to dial your destination and relax, while your computer-controlled car picks the optimum route and does the driving.

Many of these predicted processes seem ridiculous to some of us who remember when airplanes lumbered heavily through the skies carrying seven passengers (it was only 25 years ago), instead of easily swishing 100 people through the air at 600 miles per hour, or when it took three men and 14 horses working all day long to farm 1,000 acres of land (that was only 25 years ago, too) instead of two men and no horses working twice as much land—with the help of two tractors and one combine.

Yet computers are increasing the speed of change to an even faster tempo. It seems the electronic expert was right, back in 1955, when he said, "Electronic computers may have an effect on our civilization that is much more far reaching than the discovery of how to release atomic energy."
They are able to look at a problem, analyze it, take one fact from left field, another from under their noses, still another from memory, pull them together and solve the problem. This ability is, to a considerable extent, born into people, just as the ability to write, or paint, or compose music is born into others.

This, says Doug Kengisbury, head of Imperial's systems and computing services department, is the only common talent of programming. But to some extent it must be cultivated and there are, of course, some definite acquired skills.

Basically, a programmer breaks a problem into its simplest elements, translates those elements into instructions the machine understands and feeds them into the machine in proper order. The machine, following the instructions, comes up with the answer.

To do his job, a programmer must know four languages:

1. His native tongue.
2. The language of logic (the logical sequence of thinking).
3. The language of the specific computer with which he is working. This includes the codes of letters, binary digits or combinations of them.
4. The language of the flow or block diagram.

Flow block diagrams arrange the steps of a process in order and show how the steps are related to one another. They aid memory, force precise thinking and show how to solve a problem.

For instance, how do you get to work in the morning?

For you, it's as simple as "Get up, get ready, go!"

This is nowhere near detailed enough for a computer. The human mind makes connections readily, drawing from past experience and using deductive and logical thought processes. Computers need a simple, step-by-step plan with complete instructions.

Programmers might attack getting-to-work problem with the aid of a diagram like that on page 17.

With the aid of these flow diagrams, the programmer decides where various parts of his problem will be worked in the computer and then gives each part of the problem a physical location in the computer.

Once a program is ready, skilled operators record it on punch cards or magnetic tape. Then, the program can be used again, as often as needed.

The programmer, however, must check the program in operation, to see if it works and if the information developed is complete and correct. All of this takes intelligence and imagination.

Obviously, a programmer does not have a rigid one-track mind—no, he is a sort of the mind's inventors. Walter Purcell, for example, has a background of accounting and is a devoted amateur gardener. He likes to grow anything that looks pretty or smells nice. "I don't know how many hours I spend on the radio and the television to find out things," he says.

Harold McNutt, assistant head of the department, is better known to some employees as an oil painter; several of his works hang in the head office building.

Programmer George Henderson is an indefatigable do-it-yourselfer. He’s helping build a summer home, and he recently finished a boat (he finally abandoned it; they were too small). Before joining Imperial he was a professor of mathematics at the University of Western Ontario. Yet several of his associates didn’t complete high school.

The foregoing not only shows that programmers think about things other than computers, but that a programmer is apt to come from any background. For Doug Kingsbury, who is on a never-ending talent hunt for prospective programmers, hiring is no simple job. How do you sift out recruits? Kingsbury has one handy tool, the IBM programer’s aptitude test—a 60-minute written test, consisting of questions and problems based on mathematics and reasoning.

To pass this test or to be a programmer you don’t have to be a cold machine-like character. Kingsbury is amused at the prevailing notion that computer people are cold, aloof or without humor. He particularly enjoys jokes like the apocryphal one about a programmer who fed up with the unfailing accuracy of his machine, one day decided to confuse it. He programmed the question, ‘Is there a God?’ Buck came the answer, ‘There is now.’

Kingsbury has a healthy respect for the machines in his charge but, he says, ‘They are nothing more nor less than tools. They should not be feared any more than one would fear a typewriter. And they are a long way from being God-like.’

### HOW THE MACHINES TALK—
Yes, No, One, Zero

They hum, they click, they whine, once in a while they even emit howls like a saw going through a pine knot.

But the noise computers (the so-called thinking machines) make is not the way they talk.

Computers, in fact, talk by way of electronic impulses, using their own, exotic “language.” And this “language” is based on a system of mathematics called the Binary Number System.

To understand how computers receive communication, use it and talk back to their human boxes, it is first necessary to understand a little about the machines themselves.

In the first place, the term computer is actually collective. And computer men don’t even like to have their pets called computers. They refer to them as “data processing systems,” a term which is, actually, closer to describing the modern electronic marvels.

The typical system actually comprises several quite separate and distinct units, linked together electronically and working in concert.

Typically, a data processing system consists of, first, an input device. This takes information and instructions from the human operator and sends it along to the computer, which is actually the computer proper. The processor does what it is told to do, using information it already possesses, then sends the resultant data to the output device. This machine tells the operator what has happened, through wavy lines on a screen, measurements on a chart or with printed words or symbols.

The system may include a “memory” unit, although computers have no memory as such. But they can be made to hold or store coded information. In addition, there is a control unit that governs all functions of all the units.

Usually, this is a console, where the operator sits.

Basically, and very simply, this is a data processing system. But in order to work, this system must have, first, the information it needs to perform a particular job. Second, it must have very explicit instructions that spell out, literally step-by-step, how to accomplish the task at hand.

So, it is obvious that computers cannot think. The human must do the thinking: the computer can only do what it’s told to do, acting on information it has, or is equipped to develop.

True, a computer can make decisions—but only simple “yes” or “no” decisions. For instance, it is possible to inform, or “program” a computer so that it can say “yes” or “no” to a question like, "Is A larger than B?" Depending on the answer, the computer then proceeds further in its work, using the appropriate set of alternate instructions already inside it. A good programmer, by making the choices clear, but increasingly subtle, can have a computer make hundreds of decisions during the course of one job—but the computer is not actually, thinking.

But what about this “computer language”? It is simply a basic mathematical system, based on two symbols, 1 and 0. This is the binary system and under its regimen, 0 means just that, while the figure 1 is actually a symbol with different values.

The 19th Century mathematician, von Leibnitz, is credited with discovering the binary system, although it may have been in use in China several thousand years ago.

By giving the figure 1 different values, according to its placement, all numbers can be represented through combinations of 1 and 0. In our decimal system, as a digit is shifted one place to the left, its value is multiplied by 10 as shown in the next column.

<table>
<thead>
<tr>
<th>DECIMAL EQUIVALENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>10^-1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

In the binary system, as the symbol is shifted one place to the left, its value is multiplied by two, as shown below.
In any electric circuit, there are only two conditions, one when the current is on, the other when it is off. There is, therefore, a connection between the two symbols of the binary system and the two conditions in electric circuits. To help in visualizing this relationship, imagine a row of four light bulbs. These lights may be on or off by switches. Now, let's use this same row of lights to represent numbers in the binary system: if a light is on, it represents the binary symbol 1; if it is off, it represents the symbol 0.

The three lights on and the one off represent 1101 in binary or the number 14.

Using this system as the basis of its design and function, computers can do many more sophisticated calculations than the simple example above. For, with the binary system, it is possible to represent and process any combination of numbers, letters, and other symbols, or all three, by using a six-figure binary code and either adding or subtracting to or from these.

To represent a figure of millions, for instance, it is necessary to introduce a great many numbers into the computer and then tell it to add them. This brings up another very important aspect of computer language and operation. This is the area of telling the computer what to do.

Humans, who operate these machines and reap the benefits of their capabilities, do not speak in computer language. Instead, they speak in English, French, Hindustani, and whatever. So it becomes necessary to translate into computer language the information computers need to perform their tasks, and the specific task instructions. The program that gives the computer the necessary information for its work is the "programmer" as described on pages 17-18.

One of the common ways to do this is to record on seven-channel magnetic tape the symbols comprising a computer's understanding of the program. And this is where the binary system comes in, for the tape (which is not unlike the tape you record in a tape recorder) is punched according to the binary system, with what is called "this"—actually specific, tiny pieces of information.

So, using the binary system, the programmer spells out for the machine exactly the task it must perform. When this tape is fed into the computer, the information is flashed to the actual processing device, the computer, and it starts to work. When the job is finished (the calculation of Imperial Oil's 12,250-person payroll, for instance), together with the printing of the checks on a separate machine and a payroll report), the computer sends its calculations to the output device and then stops. Computers, incidentally, must be programed or "told" to stop, or they would go on performing the task forever.

The output device translates the computer-language data into numbers, letters and symbols understandable by man, and prints it on a continuous roll paper which can be stored, studied or used like any conventional office paper form.

In addition to receiving messages from—and talking to humans—computers can talk to each other. Already, in the United States and Canada, there are several extensive computer linkups, sometimes over thousands of miles. Indeed, the U.S. Air Force has in operation a worldwide hookup of all their computers, to maintain a close and accurate stores control. The RCAF has a similar, or more specialized, system operating in Canada, with the "master" computer at headquarters in Ottawa and "slave" units reporting to it from every base in Canada on the condition and inventory of such vital parts as jet engines and armaments. The CPR, the CNR, and TCA also use similar linkages to control and report on reservations.

These backups may be any one of three types—microwave, teletype or telephone. Microwave is used when vast amounts of data must be exchanged quickly. Teletype is suitable for the trading of small amounts of information when speed is essential. Telephone linkage, though, seems the most promising of the three. In this system, information to be sent is fed into tone signals, within the carrying range of telephone lines. Then, it is simply necessary to dial a specific number and transmission starts and stops automatically. In Canada, the development of these inter-computer systems has been hampered, to date, by their high cost. For instance, it costs $4 per mile per mile to link two computers via telephone cable. But computer men—and communications people—are confident that the day is coming when the extra convenience and speed provided by such systems will more than offset the cost.

Yet another and still very loose network between computers has come into being in the U.S. The computer manufacturers and consultants (a field that has sprung into prominence in the last few years) have discovered that there are certain basic business problems and programs that could be applied across a wide spectrum of businesses. As a result, firms started borrowing programs from each other. One computer company off the -gram fitted directly into their own operation. This, of course, saves the time (from a week or so to several months) that it takes to create a new programmed plan. It also saves a lot of money.

This borrowing has led to what is, virtually, a "library" of programs and data—and another problem. The computer made by one firm often cannot understand the programs of that made by a different manufacturer. So, computer men, manufacturers and users alike are now at work trying to develop something they call COBOL, short for General Language. This will, in fact, be a "computer esperanto." When it has been completely developed, programs will be done in COBOL—and still be understandable and usable by any other computer.

Bell Telephone people claim that Canadians are the glibtest people in the world. We make 500 phone calls per person, per year. Just suppose we make twice as many calls than humans, and taking up more telephone time. Perhaps some day we may have to put off that call home about working late at the office, while a computer in Montreal is telling it all the wonderful things happening in Vancouver. --Jack Pfiil.

Father Aquin told me when I visited him last winter that he believes in shattering precedent. "Nothing stands still," he says, "least of all God's work in a changing world."

His own life reflects this. The youngest of eight children in a deeply religious family, he grew up in the Montreal back-door suburbs of Ahuntsic, financed himself through classical studies at Jean de Beauce College and the University of Montreal, and was a seminarian major to charge of physical training early in the war.

In 1942 this bull-shouldered young athlete with the build of a wrestler and the heavy arms of a weight lifter astonished his friends by entering the rigorous Jesuit order. In 1954 after twelve years of training, Father Aquin was ordained and appointed chaplain at Montreal's St. Joseph's de Paul Penitentiary. Somehow he retained his restless spirit.

"I wanted to be with workers who needed a friend. Then suddenly, it hit me. Prisoners in Montreal had a pauper of their own. So I fired firearms, police, stewards on the wharves, even employees of the Montreal Transportation Commission. The only group of workers with no spiritual guidance, no one to turn to in trouble, were the taxi drivers. The big problem was how to reach them."

Father Paul, as he is affectionately known, solved this in his own inimitable way. His idea was religion on wheels and a portable chapel that could move freely between Greater Montreal's 2,000 taxistands, bringing Mass to drivers. Quebec's more conservative clergy looked askance but Paul Emil Cardinal Légére took Le Bon Dieu en Taxi under his wing, with one stipulation: It must be completely self-supporting.

Fr. Aquin tours the city's 2,000 taxistands in his own cab
Financed by friends of Father Aquin and donations from taxi drivers, the project took shape in a $7,500 trailer, 46 feet long by 8 feet wide and divided into two sections—a social centre with snack bar, television and hi-fi radio, and a combination bedroom-office-sitting room that became the first chapel-on-wheels in North America when Father Aquin reassembled the furniture and set up a portable altar on his desk.

Montreal firms supplied furnishings, slashing prices to cost and in some cases giving them free. One firm donated a station wagon to pull the huge unit. In January 1957, Father Aquin saw his dream come true as Cardinal Leger blessed the gleaming blue-black-and-white trailer in a special ceremony at St. Joseph's Oratory on the slopes of Mount Royal. Le Bon Dieu en Taxik took to the road.

It was an instant success. Catching popular imagination, it parked at a different location every night and within a year covered each of Montreal's 250 Roman Catholic parishes at least six times. Masses were celebrated weekdays at 10 a.m., Sundays at 2 a.m. and 4 a.m. Local radio stations broadcast its whereabouts on all-night programs.

Because the office-turne-chapel provided standing room for 45 people at best, hundreds of listeners sat in their cars and heard the service over loud-speakers. Le Bon Dieu en Taxik quickly became a "must" for tourists and a mecca for night workers including a good percentage of Greater Montreal's 14,000 taxi drivers, 6,000 employed full-time and 8,000 more on a temporary basis as well as bus drivers, truckers, hospital and hotel employees, market workers, radio and television artists, waiters and waitresses, nightclub entertainers, bartenders and bouncers from local taverns.

If his flock was unusual, so was Father Aquin's approach to their needs. One day he found him celebrating Mass in a market place, the next found him down by the waterfront. Between religious services and bearing confessions, he ate, slept and lived in the trailer, throwing its door open to anyone in trouble regardless of creed.

The taxi drivers remained his prime concern. When a newspaper reporter asked him why, his answer was prompt. "Because they need me most. These men work all hours of the day and night for an average take-home pay of forty dollars a week. Their family life is disorganized. Wives and children suffer while the men themselves are exposed to all the rottenness of a big city after dark. They need the Church. My job is to bring it to them."

At the end of two years, the mobile chapel had moved 1,000 times and brought Mass to 300,000 people. Midnight Mass at Christmas found nearly 2,000 cars outside it. Weekday callers dropped in at the rate of 250 a day. Some wanted comfort, others spiritual aid in solving their problems. For still others needs were more basic—food for a hungry family, clothing for winter's cold, financial assistance in times of sickness or unemployment. To all, Father Aquin gave sympathetic understanding and what material aid he had on hand. As the work spread, three fellow Jesuit priests joined him in religious duties and four laymen helped with the social service. Quartiers grew increasingly crammed and in 1958 Father Aquin began raising funds from the public for another trailer, this one to be used entirely as a chapel thus leaving the original Bon Dieu free for the taxicab's snack bar and his own reception office for callers.

Like its predecessor, the new trailer quickly became a reality. It measures 55 feet by 10, uses forced oil heating and air conditioning, and features several unique innovations. One end is completely walled in glass. When a curtain-screen is pulled aside, priest and altar are fully visible to cars parked outside. The chapel contains an organ, 80 feet of fluorescent lighting and pews for 50 people as well as standing room for 125 more. "It's the finest trailer church in the world," says Father Aquin and everyone who sees it agrees with him.

With the dedication of this bigger and better chapel in January 1959, Le Bon Dieu en Taxik ceased its peripatetic wanderings and settled down in the open parkland of Fletcher's Field at the foot of Mount Royal, less than a stone's throw from Park Avenue's streaming traffic. In 1961 it moved to a permanent site in the Maisonneuve Shopping Centre on Sherbrooke Street East where it now operates as Canada's only "drive-in" church housed in a sprawling trailer complex of five separate units and facing the wide concrete plaza.

To reach it, I climbed a shallow flight of steps and discovered the original blue-black-and-white trailer dead centre with Le Bon Dieu en Taxik blazoned across it. A sign in a curtained window indicated this was Father Aquin's "bureau" and gave the schedule of Masses. I opened the door and found myself in a comfortable wood-paneled room with wall-to-wall broadloom, big leather chairs and a modernistic head of Christ in brass on the wall made
by an ex-secretary whom Father Aquin had once helped. 

At one end a white-coated attendant affiliated at the snack bar where a French-Canadian television program was in progress, behind this, a feather-covered door led to Father Aquin's office. Since this was shut, I sat down and waited with three calldrivers, their vizard caps on their knees and cups of coffee before them. I confronted Father Paul. They waxed enthusiastic. "He's the last thing that ever happened to us. Just what we needed—a savior (cassock) with a smile!"

When it was my turn to enter the office, I began to see what they meant. The cabbies' priest is a big man in every sense of the word. So is the smile that lights up his round rosy face and twinkling dark eyes. "You're younger than I expected," I exclaimed facetiously.

"I'm forty-one. Sometimes I feel a lot older." His smile faded as he glanced down at a voluminous ledger on his desk. Then it returned. "What can I do for you?"

"Well," I said hesitantly, "first of all, I wonder why La Bon Dieu en Taxi stopped moving around?"

"It had to. After nearly 2,000 stops, people knew of us. Now those who need us can find us, right away, when they want us. Here in the shopping centre we're easily accessible. And, besides, one of my assistant priests tours the taxi stands in an official car of ours!"

To Father Aquin and his workers, "help" covers a wide range. One phase of it is the solace of Mass provided once daily and every hour on the hour from Saturday midnight until 5 a.m. Father Aquin's delight in the mausoleum-trailer-chapel was obvious as he led me outside to its turquoise-painted length at one end of the complex and showed me the beautifully appointed interior. The altar was nothing to speak of, a single altar enclosed in wide curving glass. A more material concept of help became apparent when he took me to another trailer stocked with food.Canned goods filled the shelves, with baby foods predominant. Crates of fruits and vegetables were stacked to the ceiling. Two large freezers held meat and other perishables. Staples filled the trailer's remaining space.

"It looks like a market!" I exclaimed.

"It is, in a way. That's why I call this unit 'Stein-God'."

We both laughed, conscious as Montrealers that Steinberg's is the city's largest supermarket.

Still another meaning of help in Le Bon Dieu en Taxi sense is found in twin trailers linked by a corridor and containing offices, a dormitory, and a workshop. Here I was introduced to Paul Emile Collette, ex-banker manager who acts as administrator.

"He's my right-hand man," said Father Aquin. "Before he took over, I kept getting bogged down in red tape. He cuts right through it and things get done fast."

At present Le Bon Dieu en Taxi employs a full-time salaried staff of nine including the business manager, a public relations officer, service workers, stenog- rapher, switchboard operator, maintenance man, and Jean Paul St. Germain, formerly a taxi driver and now macabre attendant who checks over visitors and hoovers outside the 'Piste's door. 'He's very important,' Father Aquin explained. 'Believe me, I get some queer callers!'"

Last but not least is Father Jean Louis Lalonde, Father Aquin's fellow-Jesuit priest who assists in religious duties. When we returned to the office, Father Aquin showed me the ledger on his desk and leafed through his handwritten records of this week's calls. An unmarried mother-to-be was decided to place her child for adoption. Another had tried to commit suicide. A Polish boy needed a job, so did a girl from Gaspé: A taxi driver was sick, another's wife needed an operation. Somebody else's daughter died in hospital and Father Aquin was called on to break the news to her parents. Yesterday he had been summoned to the morgue, this morning he had put up bail at a police station.

As we talked, his phone rang almost incessantly. Hang- ing up the receiver, he turned with a sigh. "All the mis- eries of Montreal come our way. We've had 6,922 calls for help in the past seven months. Many are emergencies."

For these, Father Aquin spends to the scene in his pale- blue cab with flasher and siren on top. Traffic is cleared for it since, in many cases, emergencies can mean life or death. (A recent one, for instance, involved last rites for a young mother who had taken poison in a moment of despair.) A vizard taxi driver's cap with a padre's emblem hangs in the priest's office.

To this non-conformist member of the clergy, hunger spells emergency and "Stein-God" feeds families a week regardless of language or creed. Formal investigation is held to a minimum. Father Aquin has little pa- tience with bureaucracy. "If someone comes to this office and makes up a hard-luck story, I tell him he's not lying to me. He's lying to Someone Upstairs!"

Primarily the taxi drivers' friend, he helped found the Montreal Taxi Credit Union with a present working cap- ital of $60,000 and 950 members. During a long Mont- real taxi service strike back in 1961, "Stein-God" fed striking drivers' families. Father Aquin made newspaper headlines that year when he alleged that finance com- panies were charging excessive interest on taxi purchases and setting city-issued permits in default of payments. The permits, he said, were then offered to would-be taxi owners for as much as $6,000. The city price is $75. Due largely to Father Aquin, this situation is now improved.

"Things are better since the City of Montreal stepped in with interest limits," he told me, "but taxi driving is still a tough life. Hours are long, work irregular. Few drivers have anything like $387 a month to buy their own cab. Most of them pay $12 a day to rent one. Take-home money can't support large families. Matrimonial troubles are a hazard. So is alcoholism. They have no security, no in- surance or pension schemes. I know these were inside out and I can honestly say 80 percent of them aren't driving cars because they like it."

Last year the 'drive-in' church attracted an average attendance of 800 cars at nocturnal Masses, made Christmas for 5,112 taxi drivers' children who otherwise wouldn't have any, and sent 250 more to summer camps. In his office, Father Aquin consoles, advises or just listens. People from many walks of life drop in to see him.

The chapel-trailer costs nearly $100,000 a year to run and all this money is donated. "We are rich in our friends," says Father Aquin simply.

Among the celebrities who rally to its support is Father Aquin's long-time friend, Maurice "The Rocket" Richard. "I call him my twin," the priest says, "We share the same birthday and grew up together in Ahuntsic. The day Maurice played his first professional hockey game, I entered the priesthood."

"Boom-Boom" Geoffrion and Jean Beliveau are his friends.

Richard's Cansfest teammates Jean Beliveau and the redoubtable "Boom-Boom" Geoffrion have served at Mass in the car. "The well-known hockey players are often found parked in their cars for a service after the game at the Forum. Managing Director Franke Stelke of the Canadian Arena Company and wrestling impresario Eddie Quinlan are patrons. Leading French-Canadian radio and TV personalities organize benefit shows and give their services free.

Funds are raised by door-to-door canvass throughout the city. One year The Knights of Columbus donated the annual proceeds from their Christmas cake sale (about $40,000). Non-demonstrational service clubs like Rotary and Kinsmen have also contributed.

When I left Father Aquin his warm handshake and smile stayed with me. Outside his office, the snackbar-waiting-room was crowded. Taximen chatted, drank coffee and glanced at the leather-covered door. It was after five o'clock but their priest's day was far from done.

As I crossed the wide plaza, dusk shrouded the Maison- neuve Shopping Centre. A shabbily-dressed woman passed me, herding three small children before her. Was it my imagination or did she think her shoulders straighter, her step quicker, moving unerringly toward Le Bon Dieu en Taxi? I don't know. I only know that as I turned home- ward the lights in the trailer windows of Canada's oldest church shone brighter than surrounding store fronts, brighter than blazing moon—as bright perhaps as the gleam of a single candle lit against the darkness.
AISLE SEAT FOR THE SHAREHOLDERS

by Michael Jacot

The April sun splashes the rostrum. A current of excitement begins to run through the concert hall. People dot the floor in small, uncertain groups: a woman in a flowered hat, an old gentleman on a stick, a young man in a pin-stripe with his mother. The symmetrical line of the seats is broken by heads decorated with fur, Homburgs, beehives and fringed bald pates.

There's something wrong with the microphone; a brittle unprofessional voice counts, "Testing, one, two, three . . ." Two photographers stand by the doorway, cameras slung round their necks like tourists.

In the lobby outside there is bustle and nervous anticipation. Pretty girls check names, a short queue forms to the double doors and a man in a grey suit watches his watch, watches the corridor, watches the stage.

By 10:55 a.m. the hall is full. Then there is a sudden hush and the groundswell of talk fades to silence. A group of men carrying near brown briefcases troops onto the rostrum. Now the show can begin.

The men with the briefcases are not the orchestra, nor are the people assembled to hear music. The men are company directors and this is an annual meeting. Imperial Oil's annual meeting, to be exact, held at the Royal York Hotel in Toronto near the end of April every year. But the atmosphere is reminiscent of a theatrical first night and, in fact, the physical side of the meeting is planned with theatrical precision (the actual meeting, of course, is unattended).

Plans begin months ahead. As soon as last year's annual meeting was over, the hall was booked for 1963. The physical arrangements must be perfect. The acoustics, the lighting, the seating, the background, must be co-ordinated. Chairs, tables, microphones, telephones, accommodation for secretaries and typists must be arranged. Proxies must be printed, collected and counted, notices sent out. Material for the annual report must be gathered, written, edited, printed and designed into a booklet. The food must be ordered (Imperial's meetings have a buffet lunch) and the film prepared. (Thousands of feet of film are shot every year to make up the approximately 20-minute review of the year's highlights which the shareholders see after the meeting.) Speeches outlining the operations of the main departments to be written and duplicated. Plans, plans, plans.

Why? Because an annual meeting is the most important public event in any company's year. It is here that an accounting of its operations is given to its owners, the shareholders. It is here that a company stands square on its feet and tells what it is and what it does.

Imperial's meeting, although it has the stimulation of a first night, is noted for its parliamentary approach. But some annual meetings have been likened to political or
Imperial's president Bill Twaits opens the annual meeting

revivalist meetings. In our U.S. company a brass band accompanies the directors to the rostrum, and the meeting ends in a cocktail dance. In another, new company products are unveiled by chorus lines accompanied by dramatic choirs on the Hammerstein organ. Closed-circuit television and loudspeakers, plant tours, free samples of leevax products, organized traveling and questioning have all appeared to drupe a cloak of glimmer and gaiety over some U.S. financial meetings in the last few years.

Other companies, seeking adequate space to handle attendance have found some strange meeting places. Several thousand people attend the meetings of Standard Oil of New Jersey, General Electric and American Telephone and Telegraph, which feature box lunches and 80 or 90 moveable microphones, and may be held in aircraft hangars, warehouses, theaters, dance halls, and movie houses.

Last year Standard Oil (N.J.) held its meeting in Chicago's Uptown Theatre. (Outside, a large sign proclaimed that "Lover Come Back" would be resumed on Friday.) General Electric usually holds its meetings in a factory building in Schenectady. In Canada most annual meetings are held at company head offices or in hotels and the prime purpose of the meeting is still the dissemination of information about the financial state of the company.

But behind the hoop-la of some U.S. meetings and the more staid Canadian approach is a common realization that the annual meeting is increasingly important because today's shareholders are increasingly interested in their companies.

There are over three-quarters of a million shareholders in Canada, and 17 million in the United States. Most are ordinary people who have invested their savings in a few shares of a firm which they believe in. For instance, over 40 percent of Imperial's 43,500 shareholders are women, and over 60 percent of the shareholders own 50 shares or less. About 86 percent are individual shareholders (as opposed to organizations that hold shares).

About 500 people — some from as far away as Montreal and Winnipeg — are at Imperial's annual meeting every year. This is well above par for most Canadian companies. The meeting is opened by the president. He gives a commentary on the activities of the company during the year and glimpses into the future. The annual report is moved for adoption by the shareholders, and the directors are appointed for the following year.

Finally the new directors hold the private meeting to elect among themselves the president and vice-presidents and to appoint officers. While this is taking place, the shareholders watch a color film about company work across the country. After this lunch is served. The whole procedure, including lunch, usually takes about two hours. This precision and ease with which it is run belies the work that goes into it.

The mastersmash of this smooth technical operation are three men, heading a combined staff of 50. They are the company general secretary, George Henderson, 50, a commerce graduate of the University of British Columbia, who joined Imperial in 1956; Nester Bodrug, 59, assistant secretary (Corporate Division), a quiet-spoken, logical man with 34 years in the company behind him; and Cy Curry, 59, English-born and an ex-radarman, assistant secretary (Stock Transfer Division).

These three are responsible for every nut and bolt in the meeting. They are the producers — to use a theatrical term.

Henderson is new to the job. Last summer he succeeded a man who had presided over the preparations of Imperial annual meetings for 16 years — Colin Critchon. Critchon, known among other things for his natty Swatch hats and easy manner, became a Canadian authority on annual meetings during his 40-year career at Imperial.

Critchon's smiling face, beside the directors, seemed to instill confidence in the most nervous new usher, shareholders and officials. Henderson says of him, "I don't think there was ever a hitch in the meetings during the time he ran them.

Which is quite a tribute, for there are literally hundreds of legal, financial, commercial and public relations duties to carry out in connection with the meeting. Each year, on the first working day after January 1, Henderson (like Critchon before him) walks down the corridor from his office into the office of W. O. Twaits, Imperial's president. He lays on the president's desk which informs him that the time has come to plan the annual meeting in earnest. Plans actually began behind scenes in late summer, when the design and format of the annual report was being discussed.

Then follows a series of board talks, and meetings of those concerned. What special facets of the company's activities are of interest to shareholders this year? Who will explain them? What forms should go into the annual report? By Canadian law only a few facts pertaining to a company's profits and losses are required but in fact the fullest financial statement possible is given by Imperial.

The date of the meeting is confirmed: usually 11 a.m. on the last Friday in April. Friday because the end of the business week finds people more free to attend and willing to listen; eleven of clock because the meeting can be neatly followed by lunch; the last Friday in April because the annual meeting by law must take place within four months of the end of the financial year of the company. Imperial's report publication date is aimed at one month ahead of the meeting. By law it must be in the hands of the shareholders within 10 days of the meeting.

The proxies — forms on which the shareholders cast their votes — must be prepared, designed and printed. Imperial sends one with the notice of the date of the meeting and another two weeks later if the first is not returned by the shareholders.

Meanwhile the three or four directors who will address the meeting are checking their speeches. Henderson, Currie, and Bodrug have done some checking themselves — on the menu, the seating, the microphones (both on the rostrum for the directors and on the floor for questioners), the lighting.

On meeting day, the really hard part of Currie's job begins: ensuring that everyone who has an appointment knows it and identifying those that are shareholders. All shareholders get official invitations with their proxy forms. (Outsiders may come too, but they cannot vote.) About 12 people from Currie's department sit in a screened-off area near the door. As each arrival registers, his name is checked off in a book containing the names of all 43,500 shareholders. The checking is all completed in time for the president's tabulation of votes which comes halfway through the meeting. Currie says, "We have to work like the wind. Last year we made it with seconds to spare."

The first shareholders arrive about half an hour before the meeting. Last year the first man in was Wallace Brazer of Hamilton, a shareholder since 1929. Brazer takes in the meeting every year. Another of last year's early arrivals, a woman who told me "I want to know more about Imperial's operations. It's my money that is helping build this company." Her companion said, "I came for the same reason — then she added quickly, "you also have good lunches!"

Among the 500 who turn up every year at Imperial's meetings are a few who come only for the free lunch (usually lobster hollandaise and the fillet, and, on rare occasions, someone disrupts the normally-severe course of the meeting. A shareholder appeared in 1961, dressed in a large hat, and attended to the embarrassment of some officials and the delight of some shareholders — took aim at the directors like Don Quixote jousting at windmills.

A few years ago a colorful man-about-meetings was "One-Shot" Sweeney. He owned one share in do-

The meeting is thrown open for questions from the floor of companies and habitually attended their annual meetings, demanding such things as free products or the total resignation of the board. U.S. meetings still draw an assortment of hagglers, publicity-shy men and eccentrics. Also at many U.S. meetings are professional annual meeting attenders. They pester, as does dozens of shareholders and even put out an annual report on annual reports.

All this shareholder interest is relatively new, a reflection of the average man's keener interest in business after World War II. Before then, many annual meetings could be held in the president's office because shareholders rarely attended. For years Imperial's meetings were held in Sarnia (at that time officially the company's head office) in such locations as an old chemistry lab and a downtown dance hall. When gathered at the latter site, the directors could find only one private "conference room" for their traditional short meeting to elect the president and other officers from among their ranks. It was the ladies' washroom.

In 1952 Imperial's meetings moved to Toronto and to better accommodation. Shareholders began to turn up in larger numbers. Questions at the meetings became more intelligent and sometimes highly technical. Gone are the days when a lone shareholder would risk to ask the president for free gasoline or tickets to hockey games. This in itself reflects the groundwork laid by previous well-conducted annual meetings and information programs for the shareholders.

Gone are the days, too, when, as happened at Imperial 35 years ago, a porter announced to the president at the annual meeting was about to begin, "Sir, there's a share-

To which the president is said to have replied, "Tell him we're busy in a meeting!"

After the meeting, a buffet lunch, a chat, and then home — until the next big day for the shareholders.