**REVIEW IN REVIEW**

An approach to reality. To some of its recipients the Review is more than casual reading matter. Our 1960 "special" on the Canadian north has become a reference work for geography and social studies teachers. Last year's issue on This Crowded World is still sought by town planners. But perhaps the Review's most gratifying use is in the provincial mental hospital at Ponoka, Alta., where it is helping alleviate mental illness.

The Ponoka staff is engaged in a therapy technique called "removalism" — an effort to get patients to focus their attention on simple, objective features of everyday life. It is based on the premise that a person is never totally mentally ill; that there are "unwounded" areas. These areas have to do with ordinary everyday happenings — the way a tree grows, the weather, the history of a province, the things one might find in a department store — facts unrelated to the patient's emotional difficulties.

"The male nurse invites and encourages from 10 to 15 patients on his ward to meet with him," writes George Crowhurst, remission co-ordinator. "He invites them to be fellow explorers in the real world. A circle is formed with the nurse in the centre. This gives the patients a feeling of unity, of being in a group, maybe for the first time, and also a feeling that the nurse is as close to one patient as to the next."

The meeting moves through five well-defined phases, beginning with the "Climate of Acceptance," in which the nurse carefully draws each participant into the group, and ending with the "Climate of Appreciation" in which the nurse thanks each patient for coming, and discusses plans for the next meeting.

The Review and certain other publications are used in phase II, "An Approach to Reality." This is created by reading objective material: poetry, famous quotations, short stories, articles, current events. The patients are encouraged to read a few lines or verses after the nurse.

"Patients who have hardly spoken for years are now reading and talking a little at a time," writes Crowhurst. "This may seem strange, but it really works."

The secret world of toys. As any child or elf could tell you, this is the magic time of year when toys in all the toyshops of the world come to life at night. The monkeys strike up the music, the boy dolls dance and flirt with the girl dolls and the other creatures rise up from their boxes to quack and bark and cheer. You don't believe us? Roy Nichols caught them at it in the Reliable Toys' showroom, Toronto. Snapped a picture of them for our cover, too, just before that little yellow dog chased him off the premises.

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**IMPERIAL OIL REVIEW**

*They don't make 'em like they used to*

A few months ago a British Columbia group purported to examine the oil and gasoline business in that province and came up with some oblique references to "semi-monopolistic" features in the industry. The group also produced a sinister-sounding economic term, "oligopoly," which hasn't made the standard dictionaries yet but which means a partial monopoly.

All of this must be causing the old 19th century tycoons to writhe in their graves. In their day a monopoly was a monopoly. It was, as Webster says, "exclusive control of a commodity or service in a given market, or control that makes possible the fixing of prices and the virtual elimination of free competition."

It's pretty hard, by any stretch of imagination, to see how today's oil and gas industry measures up as a monopoly or an oligopoly. In western Canada alone, some 240 different companies are exploring for or producing oil and natural gas. They bid strenuously against one another for acreage from which to produce oil. (Strange — because if they were operating a monopoly, they'd get together and peacefully divide up the land.)

Some 22 different companies operate oil refineries in Canada, with as many as five in some counties. (Rather a sloppy way to run a monopoly; by rights, they should parcel out the cities among themselves, keep out of one another's territory and forget about competition.)

Same thing applies to the marketing of products, wherein there are literally thousands of individual distributors, jobbers, commission agents and dealers. For instance, Canada has more than 36,000 gasoline retail outlets and 30,000 of these are independently-operated.

Do the major oil companies fix or control prices? The answer is obvious to anyone who reads newspapers: in 1962 the Canadian oil industry was involved in the fiercest marketing struggle it has ever known. There were gasoline price wars in almost every main population centre. Discounters of all kinds were getting into the retail gasoline business. What kind of a monopoly or oligopoly is this that permits price wars in its major volume markets?

What kind of a monopoly is it, too, that has allowed gasoline prices to go up only 46 percent since 1939, while Canadian wages and salaries have increased more than 200 percent? And if the industry were really a monopoly, in which all products were identical, why would Imperial spend $3.5 million a year on research to stay one up on its competitors?

It must all appear mighty puzzling to a monopolist of the old school. Obviously, they just don't make monopolies the way they used to.
When my new neighbor dropped by, we were still unpacking.

“I hope you and your husband square-dance?” she inquired brightly.


“I’m sorry,” I said. “I don’t go out much, especially after a move. I have too much homework.”

Her eyes surveyed the room. Four of the older children were noiselessly sorting the kitchenware. Two others were quarreling over the innards of a crate of toys and the two-year-old twins with large cartoon on their heads were charging each other. Tonka, our German Shepherd, barked furiously.

“You don’t teach school?” she asked over the din.

“Well, not exactly,” I shot back.

“Then you must be one of these night course fiends. Modern art, maybe?”

I could see she was puzzled and explained how each time we move from one province to another the youngsters run into school problems.

“This year, for instance, I’ll have to teach Carla to write. Her classmates in Grade III here learned to write last year in Grade II. But in Edmonton in Grade II she only printed. Karan and Patrice our nine-year-old twins failed to find that they’re ahead of their Grade IV class in multiplication but anyway behind in their division tables. Allannah, going into Grade VI, finds she’s missed out on decimals and percentages, and has to catch up on a lot of Canadian history.”

As I talked about the differences in curricula among the provinces, my neighbor was amused. “I’ve lived in Saskatchewan all my life,” she said. “Why are our schools so different? We’re all Canadians, aren’t we?”

It was a good question. For years I’d accepted a new batch of homework with each move as part of an oil wife’s life, like mowing over dunes that never fit and scooping out basements that always leak. My neighbor’s surprise startled me thinking.

With more new neighbors yet to start school, each move will get worse. Why should I be doing sums when everyone else is off curling? Why are our curriculums so different?

I set to work to find out. I wrote key educators in each province: directors of curriculum, ministers and deputy ministers of education, school trustees, representatives of the Canadian Home and School and Parent-Teacher Federation, superintendents, principals, teachers. No one, mild or mighty, escaped my probing pen. I talked to many in the Department of Education here in Regina. I phoned and wrote dozens of my friends who had moved from one province to another to recheck conversations we’d had over school problems.

I am amazed to learn how big the problem is. The Dominion Bureau of Statistics says that, each year for the past five years, about 110,000 children—representing 110,000 families—moved from one province to another. That means that every year there are 110,000 mothers in the same boat as myself.

And the problem, if anything, will become more acute. At the 1960 annual meeting of the Canadian Home and School and Parent-Teacher Federation, a resolution was passed that “all core subjects be standardized in all Canadian schools.” (Core subjects are English, maths, science, history and geography.) Max Bedford, president and an instructor at the Teachers’ College, Saskatoon, was asked to secure “evidence of the nature and extent of the problem created by differences in the basic curricula across Canada.” Last May, he reported that, of the families studied over the past four years, more than 20 percent of families with high-school students moved at least once from one province to another. According to the parents, at least 20 percent of the students experienced serious difficulty because of the new curriculums.

Furthermore, he forecasts that “…over the next 10 years in Canada one million school children will transfer from one province to another, and over 300,000 of these will experience serious difficulty in adjusting to the new curriculums.”

The experiences of Garfield Stewart, Imperial Oil’s retired manager in Regina, is fairly typical of the mobile “oil family.” He, his wife Helen, and five sons have lived in Alberta, Manitoba, Ontario, British Columbia and Saskatchewan. In Regina, Don, their oldest son, in Grade X, smacks into the problem of having no Latin. The principal of the high school told Garf that “Needling no Latin in high school is a sin and a delusion.” Other provinces place less importance on Latin. Even with being tutored all summer, Don’s had a tough two years in Grades XI and XII due to the extra time being spent on Latin. “Some people say that this challenge is beetle-building,” says his father, “but, in my opinion, it’s a needless strain, not only on the boy himself, but on the rest of the family.”

Tutoring costs money. One woman of my acquaintance found, after moving to a different province, that having her son tutored two or three times a week in chemistry and French, was a heavy drain on her finances. But it was cheaper than repeating Grade XI.

A 17-year-old jumped a grade into Grade XI when he moved to Ontario from Newfoundland, then found himself repeating Grade XI in Saskatchewan. “With nothing to do for a year,” his mother told me, “I am an unattractive Irish bride. He nearly drove me crazy. Half the next year was over before we got him down to study again and it took six months’ hard prying to St. Patrick to pull him through Grade XI.”

Not all students have so much pull. Another 17-year-old, moving from B.C. to Regina at Easter, learned that to continue high school she would have to repeat Grade XI, carry a number of Grade XII subjects and take Grade IX language. She dropped out. “I didn’t want to be put back with kids three years younger,” she told me. “It wasn’t so much the difference in standards but the difference in courses and the different criteria given to live similar courses.”

Henry Hagen, Saskatchewan’s director of curriculum, says that one of his major headaches in placing student transfers to Saskatchewan is caused by the different number of years required to complete high school. Ontario and B.C. require five; the other provinces four.

The difference in timing of the same subject often results in serious gaps in learning. For example, a student moving from Ontario to B.C. at the end of Grade X, repeats Canadian history and misses both Ancient and World History. On the other hand, if he moves from B.C. to Ontario at the end of Grade X, he misses Canadian History altogether and repeats World History.

Most of this diversity in the curriculum is due to the fact that the British North American Act gave each province control over education. For one reason, communities were then so isolated and communications so slow, that only local control was feasible. Secondly, provincial autonomy in education permitted Quebec’s linguistic and religious patterns of culture.

This was a rarity ago. Today the world is on our doorstep. I asked key educators in every province how they now look toward merging education to local needs and why we couldn’t have greater uniformity in our courses of studies.

“The majority of the directors of curriculum—those responsible for formulating the course of studies in each province—express the fear that a uniform curriculum would interfere with provincial identity and would not allow for geographical, ethnic, social and industrial differences.” The Hon. Leslie R. Peterson, minister of education in B.C., reflects the views of the directors of curriculum of Alberta, Manitoba, New Brunswick and Quebec when he upholds “provincial independence” with scope for “provincial beliefs, provincial needs, and local interests.”

M. B. Purcell, assistant superintendent of curriculum in Ontario, worries if failure to consider these factors might result “in a less individualized and less personal kind of instruction.”

This was cold comfort for me and my brood. I found Dr. Hills Nearby, head of the department of history, University
of Saskatchewan, was fortuitous. "I know how hard it is for parents moving about to have children teased from project to project and from textbook to textbook. Basically, I think the solution is to keep away from these dreadful prepackaged courses and to concentrate on solid learning... to read and to write, to do simple arithmetic and to have some elementary knowledge of history, geography and art, if possible, of French." A solution to the problem which has been widely discussed in the U.S., is a non-governmental National Curriculum Commission. One of the foremost advocates is Dr. Paul Friesen, professor of child education, Stanford University who maintains that local authorities haven't the time, money or scholarship to keep abreast of the present rash of new ideas. However, most Canadian educators are not enthusiastic.

Dr. A. Middleton, formerly director of curriculum and research for New Brunswick, claims that, "With so many divergent points of view and regional interests, it would be difficult to develop a common program acceptable to all." I find the prospect of a national body regulating curriculum, body, politically and professionally confusing," says Morrison L. Waris, Alberta's curriculum director. Even Dr. Neubly says, "I think a national committee to agree on general standards of achievement would be helpful but it would, of course, have to be on a purely voluntary basis and I am not sure that in the present stage of our development this pooling of wisdom would produce any very admirable educational results."

"Uniformity would be fatal to experimentation and make it harder to adopt education to changing conditions," says Eileen Owen, Quebec's director of Protestant curriculum. Charles Blouin, research officer, Deputation de L'instruction Publique, Quebec, asks "How can there be a uniform curriculum for the 10 provinces when each has its own tradition, standards, viewpoints with public and separate schools, English and French schools?"

I don't quarrel with differences in viewpoints. Indeed, they're highly refreshing. I can't think of a better way to add zip to the study of Canadian history than to see the amazing difference in interpretation of the same events between English and French-Canadian history textbooks. What I do ask is that we all study Canadian history in the same grade—just so some of our children don't miss it altogether.

An articulate spokesman, Dr. W. S. Steinbruner, former principal of Regina Teachers' College, speaks for most teachers. I think, when he claims that, "Standardizing would curtail the teacher's freedom to develop things in her own way" and that "The same subject being taught at the same time on the same day all across Canada would clip the teachers' wings."

It's afraid I don't see this argument. I don't see how that the initiative of a teacher in Prince Edward Island would be cramped by knowing that someone in Alberta was doing square root at the same time. Yet, I appreciate Dr. Steinbruner's concern that the good teacher be allowed plenty of scope. So I would say to every Grade V teacher right across Canada, "This is a guide for Grade V, Miss Jones. We want you to cover this in mathematics, this, this and this in English, science and social studies. What textbooks you study, what methods you follow, what aids you use, is up to you."

Of course, I don't expect the educators to organize this within a year or so. I found some professional support for my views. H. J. B. Gough, curriculum director for Newfoundland, disagrees with most of his colleagues. "I cannot see why the broad outlines of world history, foreign languages, mathematics, English language and literature... and many other courses taught in all Canadian schools cannot be decided on at the national level... I am convinced myself that there is much needless duplication of effort in curriculum work across Canada..."

Another interesting comment came from Nick Taylor of the Calgary Separate School Board who feels that through the "jockeying of different systems... we would reach close to a national standard which would be the high one of competition such as you find in Canadian gasoline, not the low standard set by the state where there is no competition, such as in Mexico."

I am glad to say that there seems to be general agreement that something must be done about curricula. The question of standardization was discussed at the 1960 convention of the Canadian Education Association in Toronto; at a meeting of the provincial directors of curriculum and at a panel discussion chaired by the premier of Saskatchewan, the Hon. W. S. Lloyd. One of the panel members, Capt. J. D. Armstrong, proposed a foundation program in curriculum under which a national advisory committee would work out a basic curricular acceptable to all provinces to be used as a guide.

The school trustees' associations are beginning to show concern over the problem. In June of last year at the annual meeting of the Ontario School Trustees' Association, Dr. Z. S. Primmer, the president, raised it for the city of Toronto, declaring the fact that as a nation we have no policy in education, suggested the establishment of a "national educational policies commission" that would serve to keep the provinces up-to-date on what's going on in the rest of Canada and the world.

The B.C. School Trustees' Association went farther. In a brief to the Royal Commission, the association urged that the federal government be responsible for co-ordinating curricula. Last September at the annual meeting of the Canadian School Trustees' Association in Halifax, a resolution to this effect was passed.

Federal control of education was voiced in 1959 by Anthony Friesch, internationally-known education writer, who, after doing a detailed comparative study of the mathematics and science courses in Soviet and Canadian secondary schools, concluded that "we trail the Soviet three years in mathematics and two years in science. He maintains that "there exists a state of emergency in education, and, notwithstanding provincial jurisdiction laid down by the BNA Act, the Federal Parliament has the duty to take any step necessary for the survival of the nation." I note that the annual meeting of the National Conference of Canadian Universities and Colleges, held last June at McMaster University, recommended that the Canadian Education Association gather data with a view to standardizing curricula throughout Canada, more particularly at the secondary school level. The Conference also discussed a national testing program for students in their final high school year to aid in judging their fitness for university.
By Phyllis Lee Peterson

A Gothic church, some wonderful old houses lovingly lived in since the French regime, a sleepy river winding through the village—this is Ste. Anne de la Pérade. Located on the north shore of the St. Lawrence 30 miles east of Trois-Rivières, 50 west of Quebec City, it lives by the quiet seasons. For 10 months of the year its 3,000 French-Canadians (called les Pêcheurs) plough in spring, harvest in autumn and carry on small rural industries combined with a smattering of tourist trade along Route No. 1 (the Montreal-to-Quebec highway) which runs by the outskirts.

Then in December, something happens. Frosty air quickens. The Ste. Anne River freezes from shore to shore, a silver road through the village’s heart. Red-nitted children run down to its banks after school. The local Chambre de Commerce holds solemn claque. Four hotels prepare for overflow guests. From every backyard, every snow-covered field nearby, les Pêcheurs haul bright-painted canoes on sledges to set them over holes cut in river ice. At La Pérade, Noël means more than Christmas. It means the start of the tommycoy run up from the St. Lawrence to their spawning grounds in the Ste. Anne. Les petits poissons have arrived—and for six weeks Carnival reigns supreme.

I’d heard about ice-fishing—vaguely, as some mad sport for the foolhardy. But when my good friends Tom and Dorothy Norton (now Montreavers but formerly of Trois-Rivières) invited me to join them for a night on the ice, my reaction was instant horror.

“I’m the orchid type. I’d freeze to death!”

“Nonsense! You’ll love it. Just take lots of warm clothes, that’s all.” They went into a marital huddle and emerged smiling. “We’ll get Duncan Breese to join us. He knows La Pérade.”

“When?” I asked weakly, “is he?”

“Editor of the St. Maurice Valley Chronicle and a terrific sportsman. He’ll arrange everything.”

Duncan did. When we got off the Montreal to Quebec train at 10.30 p.m. he was waiting at La Pérade’s flagstop station. Ominously, I thought, he was bundled in clothes to the top. Wool toque, bulky turtle-neck sweater under a windbreaker, heavy pants, flying boots. I drew a deep breath and saw it hang white on the zero darkness. Without wasting words he packed me into his Volkswagen and drove less than a quarter-mile to the banks of the River Ste. Anne. I blinked. For a moment I couldn’t believe it.

Night was day on the ice. For a solid mile between La Pérade’s two bridges (railroad and highway), electric wire strung diamonds of light. More than 1,300 wooden cabinets huddled over the depths. Painted every color of the rainbow, they formed a tight-packed ice-village with streets winding through, music blaring from loud-speakers, smoke from sawdust and oil ascending from stove-pipe chimneys. Laughter and shrieks of song poured from the windows of huts. Suddenly I felt myself caught up on sheer exhilaration, the French-Canadian joie de vivre. So this was ice-fishing at La Pérade. The Nortons were right. I was going to love it. And I did. Every mad moment.

With commendable foresight Duncan had reserved rooms for us at Le Pérade, one of the village’s four spic-and-span hotels. We were lucky. The proprietor, Raoul Tessier, told us the place was full. Wrangling into long underwear in my comfortable bedroom I heard adjacent guests singing to the rafters.

“Oui, la baie de la Pérade accents, car c’est la saison. Allons voir, oui, oui, Allons voir, oui, oui, Allons voir, oui, oui.”

The Song of the Little Fish echoed in my ears as I followed the long johns with heavy slacks, sweaters, fur coat and hat. Downstairs in the lobby, Duncan approved my footwear—two pairs of slacks under fleece-lined boots.

“It’s the feet that feel the cold. Don’t forget we’ll be fishing over 14-inch green ice.” His hand on the wheel bounced the Volkswagen over Rue Principale’s frozen ruts. “First we’ll visit the demeures Marcotte. They’re lending us their canoe for the night.”

We could see the village church from the car, with its two high towers, an eternal monument in the night light. Down the riverbank and straight over a road on the ice we headed for l’îlet St. Ignace, a small island on the Ste. Anne’s eastern shore. Jeanne and Cécile Marcotte welcomed us into their rambling white-plastered house built in 1820. The hospitality was warm, gracious, the true French-Canadian (than which there is no truer.) Unmarried, in their fifties, the Marcotte sisters are old-family and undisputed grande dames of La Pérade. Over a petit coup (little drink) in the wide parlor, I brushed off my dusty French as we talked about the village’s annual fish “fair.”

Imperial Oil Review, December 1962
As we said before, let’s start from the very beginning. The river is so deep and swift that it is almost impossible to cross it. The boat they used was very small and摇摇欲坠, but they somehow managed to get across. Once they reached the other side, they set up camp for the night and prepared a feast.

On the next day, they continued their journey up the river, encountering various obstacles along the way. They had to climb over rocks, ford through rushing rapids, and avoid falling into quicksand. Despite these challenges, they managed to make it to their destination.

As they approached the town, they noticed a group of people gathered outside a building. It was a local inn, and they invited the travelers to come in and rest for a while.

The inn was spacious and well-lit, with a large fireplace in the center. The proprietors were kind and welcoming, offering the travelers food and shelter for the night.

During their stay, they learned that the town was known for its local cuisine, which featured a variety of dishes made with ingredients from the nearby forests and fields. They sampled everything from roasted game to wild berries and honey, and were impressed by the flavors and textures.

The travelers stayed for several days, exploring the town and its surroundings, and making new friends along the way. Eventually, they continued on their journey, ready to face whatever challenges lay ahead.

As they looked back on their trip, they were grateful for the experiences they had shared and the memories they had created. They knew that they would always cherish the time they spent in the wilderness and the stories they had heard.

And so, the journey continued, with the travelers ready to face whatever lay ahead. They were excited to see what other wonders the world had in store for them, and they knew that they would never forget the lessons they had learned on their journey.
YOU THINK YOU'VE GOT TROUBLE ...

If you've a squeak in your locomotive or a mystery in your fuel tank, the "detectives" of Imperial's Technical Services will solve the case.

...and there's not a minute to be lost.

The "Case of the Choked-up Nozzles" had Imperial Oil marketers baffled four years ago. Complaints from Esso customers in Ontario concerned a mysterious jelly-like substance being found on the brass portions of their oil furnace nozzles. This substance had no effect on the performance of the furnace until, during routine cleaning and servicing, particles of the gunk were wiped into the nozzle, plugging it.

In the tradition of chiller-suspect stories, the local forces sent for Scotland Yard—in this case, Imperial's technical services division in Toronto. Staff engineer Jim Pericival, an expert in heating oils, asked Imperial's Sarnia research department for a rush analysis of the deposits found in the plugged nozzles.

The "marmalade" turned out to be copper mercaptide. It was formed, researchers knew, by the action of a weak corrosive material on the copper of the brass alloy nozzle. Minute quantities of this were found in the fuel oil—so minute and so weak that it could not harm the fuel tank and would only combine with certain alloys of brass.

Imperial's eventual answer was the construction of a $1 million hydrocracker at Sarnia. Hydrocracking, while improving the general quality of domestic furnace oil, also removed the material responsible for the copper mercaptide.

The copper mercaptide mystery is just one of many that have challenged the sleuths of the technical services division. A sort of oil industry "Scotland Yard," headed by B. Gaulston, the division is complete with "detectives" (engineers), voluminous files and has access to large laboratory facilities. Gaulston has the task of monitoring the hundreds of petroleum products marketed by Imperial Oil.

Like most of the men who work for him, Gaulston is a chemical engineer. He's been with Imperial since 1923. "Each of my men is an expert in his given field," says Gaulston.

This is essential, for Imperial customers include factories, transportation companies, fishermen, railroaders, farmers, car owners and householders. Each of these has his own particular requirements and his problems are technical services' problems.

The division offers well qualified assistance to users of Esso products; field tests new products before they are marketed; anticipates the manufacture of new automobiles and construction machinery to prepare for future products; and advises on the correct application of petroleum products. It prepares and hands out technical information on Esso products; investigates product quality complaints, and offers customers a two-way street for the exchange of technical know-how for a given requirement.

For instance, engineers had been trying to eliminate the possibility of human errors which could prove dangerous in fueling aircraft. Imperial developed an idea which made fueling automatically safe. "We knew that the S. F. Bowes Company had been working on a water-detection device for turbo fuels," says J. D. Bell of tech services. "We asked them to undertake the development of one for our Esso refueling tenders." Bell actively participated in this development.

What resulted this year was the "Totamitor," an electronic device which scans every pint of fuel going from truck to aircraft. If water droplets held in suspension are present in the fuel, the Totamitor immediately shuts down the refueling operation. The driver of the vehicle can't restart the pumping operation until the offending water is removed from the fuel.

The Totamitor is presently in use at Toronto International Airport and TCA has requested that the device be fitted to the refueling hydrant trucks at Montreal International Airport, Dorval.

Another transportation company came up with a problem in early 1962. At that time, the Canadian Pacific Railway was experiencing a considerable increase in diesel locomotive main generator bearing failures. G. J. Young, a staff engineer with tech services and a specialist in railway problems, and the CPR's own experts investigated.

The cause, it turned out, was unexpectedly high engine-room temperatures encountered when diesels were operating at maximum capacity in the Rockies. Engine-room temperatures would soar 75° above the outside air temperature almost as soon as the locomotive entered a tunnel. Under these conditions the gasket was drying out and the bearings were failing prematurely. Tech services analyzed the problem and recommended changing the lubricant to Imperial's high-temperature Andok BR. Case closed.

Problems in lubrication, generally the lack of it, are old hat to Gaulston's super-sleuths. A paper company called tech services concerning a newprint machine that was breaking down due to lack of lubrication. Since the paper company was using a new and supposed-ly unique Esso-developed oil, this was bad news. Was the lubricant to blame? Staff engineer A. G. Rogers hurried to the scene. He found that in an effort to increase production, extra drying rolls had been added to the machine but were improperly braced. The bearings of the rolls were loaded beyond their capacity, soon became misaligned and began to disintegrate.

After prescribing a specially fortified oil to enable the paper company to put the machine back into immediate service, Rogers recommended that proper supports for the drying rolls be designed and installed. Problem solved.

Tech services with all problems had easy solutions, but in some cases they're still looking for an answer. In recent years East Coast fishermen have been using larger and deeper draft trailers to improve their offshore catches and to help them compete with modern Russian and American vessels fishing the same waters. The new trailers, with more powerful engines, have bigger propellers which require special greas. Imperial's research department is developing such a grease.

In this case, Gaulston's Scotland Yard is asking for a product not yet...
known. Most of the division's requests for research concern existing products that need only modification, development or further refinement. Engineers from the division make periodic visits to the major automobile manufacturers, the heavy equipment industry, the railways and the aviation world. The engineers ascertain the fuel and lubrication requirements of machines yet to come. For 1963, for example, the automotive industry wants a chassis lubricant to last for 30,000 miles of driving.

For these Imperial customers, tech services also provides a constant flow of technical data, analysis and brochures to assist the customers' engineers, designers and maintenance personnel.

The division is also responsible for introducing new Esso-developed products to the market. Before these can be offered for sale, tech services must field test them. This can be difficult because sometimes industry is unable to donate equipment for test purposes. For this reason, tech services often uses Imperial Oil equipment, vehicles or test facilities.

Staff engineer Grant Moffat, who specializes in agricultural products, is faced with the problems of field testing a new agricultural mulch. Preliminary testing of this mulch in Arizona and elsewhere in the U.S. indicates that it can benefit high-yield crops, such as tobacco. Moffat is testing the mulch on various market garden crops in Canada. In use, the mulch is sprayed in a thin strip over the freshly seeded rows. It slows the daytime evaporation from the earth close to the seedling and raises the temperature in the same area by absorbing more heat from the sun. Theoretically, this will accelerate the rate of growth of each plant. Tests in Canada have been inconclusive so far and, of course, Imperial won't release the product unless it works under Canadian conditions. So tech services continues with the test program.

The mulch program comes under the heading of "new use projects." The division is engaged in many of these projects for the future. One of the more successful in recent years was the introduction of oil injection to blast furnaces in the steel-making industry.

While some of tech services' men ponder future new uses, others do some judicious crystal-ball gazing. "Each year," explains Goulston, "we prepare a five-year production quality forecast. This forecast is a prediction of the quality levels required for Esso products in that time."

Speaking of quality, Goulston knows that for all of tech services' scientific skill, the best lead on lubricants still comes sometimes from nature. In World War II he was asked to draft a set of lubricant specifications for the Canadian Army, including an oil for the delicate mechanisms of various chronometers. Like any good Scotland Yard man, Goulston had thoroughly researched the case. The answer was hardly what the army expected.

"If you want the best oil in the world for chronometers," he reported to the officer in charge, "you'll find it in a use in the head of the porpoise."

—J. M. Ross.
OIL COUNTRY

By William Heine

In the bustling town of Fort St. John in northeastern B.C. there's a hotel with a special metal rack in its vestibule—custom-made for big muddy boots.

Nearby, towards the Alberta-B.C. boundary, passengers of small aircraft can look down on a geometric pattern of gravel roads framing a checkerboard of drilling site clearings, with thin black lines—pipelines—fanning out from producing wells.

And, north past Fort Nelson and into the Territories, the aerial view everywhere is of narrow seismic trails, as though a giant had been playing pick-up-sticks.

To anyone who can read signs, these three widely-separated clues tell the story of Canada's newest oil frontier. The checkerboard of drilling sites is Boundary Lake, latest main link in the chain of oil and gas fields that extends from Texas in the south and through Oklahoma, Kansas, Wyoming, Montana, North Dakota, southern Saskatchewan, southern and central Alberta to northeastern B.C. Fort Nelson is one of the major towns in the area, and is partially a product of the oil and gas play. The trails of the seismic crews lead toward the north. No one knows what lies there but the crews are going up to see, hoping they'll find yet another link to the chain.

Last summer I, too, went "up to see" part of this new oil country. My tour began in front of a wall map in Imperial's Dawson Creek headquarters. "You go over and see Boundary Lake," said Urban Chaput, assistant exploration manager of the company's Peace River division, pointing to a green oval on the map. "Then," he shifted his finger to scores of red blobs, "we'll get you up to the new gas fields."

Natural gas has been going from B.C.'s northeastern triangle to Vancouver and the U.S. for several years, he explained. "Oil's a different matter. For one thing, no really big oilfields have been discovered in the area so far."

Nevertheless, production is expected to double this year, reaching almost 30,000 barrels a day from the 246 oil wells and 148 gas wells which are now producing.

Some of the crude, notably from the Bantam River, Milligan Creek and Picture fields, is loaded with sulphur mercaptans—vile-smelling compounds that are harder and more expensive to extract than the usual sulphur found in crude. Not all refineries are yet equipped to handle this problem.

But the mercaptan content at Boundary is negligible and production began rising rapidly with the completion last year of a $35 million oil pipeline from Taylor, parallel to the existing gas line, 505 miles to connect with Trains Mountain pipeline at Kamloops. The line currently carries about 25,000 barrels a day and has a possible future capacity of about 75,000 barrels. Five-year-old Boundary Lake has over 220 wells (Imperial has 115 of them). As Chaput suggested, it was a good place to start seeing the oil country.

From Dawson Creek the quickest route is by ferry across the Peace River—at this point wide, deep, fast and muddy—
then, up a twisting road from the river’s edge. My companion, drilling superintendence George Houswood, suddenly slowed the car. “Look!” To our left stood a grey animal, about the size of a police dog, but with longer legs and a peculiarly feline look. “Just,” murmured Houswood as I raised my camera and the lynx faded silently into popular bush.

Then we were at Boundary—60 miles to the north—northern B.C.’s pride and joy. The limits of the field are fairly well established. A driller can set up his rig and with luck hit a 13-foot pay zone of oil at 4,250 feet below the ground in the Triassic (rock about 200 million years old).

Boundary was a kalescopic of noise and activity: a monstrous diesel throbbing noisily... helmeathed roughnecks desks teriously adding another length of pipe to a drill stem... the skeleton of a rig laid out on a freshly-built cleared in the muskeg, soon to push its priying finger deep into the earth.

At Imperial’s field headquarters, Houswood checked supplies while I wandered through the crew’s aluminum housing units. They were hospital-clean, plainly furnished, some with a single bed, others with two beds, almost like monastery cells in their simplicity and efficiency, except for photographs of children, wives or fiancées—or girlie pics—pinned up beside a radio.

Thirsty in the dry heat, I walked past a kitchen with stoves and washers any housewife would envy and tried the cold water tap. The tepid, sulphurous water almost choked me. A roughneck whacked my back a couple of times and roared, “God-awful, ain’t it! Here, try some of this.” The shot of con- centrated lemon juice improved the taste a little but I wasn’t thirsty any more. The driller glanced down a huge mug of the stuff and mumbled, “You get used to it.” I didn’t—but I had no complaints that night with dinner: huge platters of savory sausages, vegetables and cherry pie, washed down with scad- dle-fueled coffee and great tumblerfuls of riot.

The next day I saw Boundary Lake from 1,000 feet in Imperial’s Otter, an all-squirrel three-engine workhorse that will lift a dozen men. Fitted with wheels, skis or floats, it’ll go almost anywhere at a plodding 100-120 knots. But it’s noisy, like standing too long, too close to a power mower.

Pilot Cliff Lebey banked for a better look, then straightened out for the run across muskeg and scrub bush, past lonely Beaver River air strip, putting an aerial string to the east side of the Alaska Highway bow. On the way to Fort Nelson, only the faint green of poplars betrayed the high ground around the thousands of acres of muskeg and scrub evergreen.

Fort Nelson, 200 air miles north of Fort St. John, the jump-off point for western exploration work, looks like a frontier boom town. It glances back convincingly at the long-established centres of Dawson Creek and Fort St. John.

“We’ve 2,000 people most of the year,” says Bert Miller, past president of the Fort Nelson Chamber of Commerce, and a hotel operator. “In winter, when the muskeg’s frozen and oil crews can work, population goes up to 10,000 times at times. Space is a problem. Somebody usually dies each winter from monocle poisoning, sleeping in a car with windows shut against the cold. I’ve known five to die in one car.” Miller shook his car keys across the desk. “Have a look around.”

Fort Nelson is sprawling, raw, and, by the neat suburban standards of most southern Canadian cities, ugly. But it’s growing and changing. The 300-foot-wide “main street” is the Alaska Highway with service roads looping off to east and west. That highway is both the reason for Fort Nelson’s exis- tence and a constant reminder of its geographic location.

John McCaskill, Imperial’s district production superintendent back in Dawson Creek, told me a $1 bag of cement in Edmon- ton is $2 in Dawson Creek and $3 in Fort Nelson.

As in all burgeoning towns, the growth pains show. Partially- built homes abound. As yet there is no complete leafage in the accommodation is a problem; water and sewers are recent additions. And, curious in a gas-rich land, natural gas is only now coming into its own.

Water is particularly hard to come by and Fort Nelson has a unique solution. In winter, when the swollen Muika River autumnally disappears, the town sets up a pump station on the ice and fills a large bulldozed reservoir, for year-round use.

Perpetual’s mark is everywhere. Roughly every third truck bears an oil company or supply firm name. The bulk of the airport’s traffic is oil company planes and helicopters. Hotels, bars, restaurants, a polyester fabric mill, and even eleven cold-weather homes, were built around the search for oil and gas.

Exploration roads have opened up territory seldom seen before by trappers and hunters. There’s no traffic jam now but it’s possible to drive 200 miles north and east of Fort Nelson on these roads, though all you’ll find at the end is the remains of a drilling site.

Barry Paul, Pouce Coupe conservation officer for B.C.’s Department of Recreation and Conservation, says the oil roads have not only opened new areas to hunters, but help far trappers work their lines, and make it easier for game to move to better grazing.

But the oil men still use the north’s oldest “roads”: the rivers. One day Ken Bird, from Imperial’s Dawson office, and I spent an afternoon hunting for caribou a few miles south of Fort Nelson River. Down river a pair of barges tied to a box-like tug were loaded with oil drums, lumber, bulk foods and other heavy cargoes. The Leun was bearing thick black hair from a young Indian hand.

He answered questions in short sentences. “Weleave in late May... down the Nechen and Liard rivers, then down the Mackenzie... back in July... make a second trip in August... 25 days round trip.

A slow boat trip. Arctic. I’d like to ride some day.”

The first white men moved along the great rivers... the Peace, Parsnip, Finlay, Sikanni Chief, Liard, and the Mack- enzie. The last traders, guides, named for the Alexander Mackenzie who in 1792 was one of the first to cross the continent north of Mexico. Simon Fraser followed soon after, and the fur trade flourished until the 1840’s.

For a century explorers, trappers, missionaries, traders, prospectors and the occasional settler were the only whites to share the great valleys with Cree, Beaver and Sekani Indians. The Klondike gold rush brought thousands through from Edmonton but most either went back, went on or died along the way.

Though land had long been available for homesteaders, World War I saw only 2,000 people in the entire Peace River valley: settlers, traders, Indians and missionaries. When the railway reached the valley in 1916, population jumped to 5,000.

That year the first drills began probing the Peace in Alberta; by 1919, a dozen or more cars were toiling about with some gas and oil. Near the B.C. border an Imperial subsidiary (Northwest Company) drilled a gas well at Pouce Coupe in 1921; it caught fire and burned for two years.

Northeastern B.C.’s first drilling was near Hudson Hope in 1921; also with minor gas and oil showing. Another try in 1940, down to 7,000 feet, west of Dawson Creek, was a failure. In December 1951, Pacific Allied Fort St. John No. 1 well came in a producer. Then the seismic crews outlined an in- deed petroleum-bearing structure in the Boundary Lake area; ten years a producer in 1955; Imperial verified the structure the next year. Boundary Lake was on its way.

Fur, timber, wheat, gold, and oil... from these have grown Dawson Creek, Fort St. John and Fort Nelson, friendly rivals along the Alaska Highway. Of the three, Fort St. John has much more of the urgency of a boom town. Population in 1956 was 2,000; now it’s almost 4,000 and certain to continue to grow. It’s likely to be a base for the hydro-electric power project at Hudson Hope, some 60 miles west of Dawson Creek.

With the whole vast north in which to expand, the town made its main street no wider than older eastern cities. It’s bedlam in winter and even during the spring junk streets are crowded. Clerk-treasurer L. D. Pollack says newcomers can’t “buy, beg or steal” housing; eight contractors were building 150 houses this year and all were spoken for.

Imperial’s dealer in Fort St. John, Ross McLain, measures growth by his staff. “I’ve got nine men in summer and 30 in winter. Most are farmers who want winter work; it works well for both of us.”

Most oil supply firms are based in Fort St. John; it’s close to Boundary Lake, Peace, Millikan and other oil and gas fields and is the end of steel (B.C.’s Pacific Great Eastern) for explo- ration work farther north.

What’s it like to live in the middle of an “oil play”? Ask municipal officials, government people, oil men, taxi drivers, farmers, lumbermen, pilots, housewives, clergymen, and you get answers as varied as their occupations. A minority, like the janitor in a Dawson hotel, who’d farmed a while before going into the oil business, enjoy the fast-paced life. Most are content to the Dutch family, is discontented. The janitor had a few crop failures (I suspect he didn’t know too much about farming) and was better about northern B.C. “Whole place’s just a flash in the pan,” he said. “It’ll all peter out in a few years.”

A bush pilot’s young wife, tending an airport coffee bar, couldn’t wait to “get back to civilization.” A taxi driver was saving tips to buy a ticket south before “the darn cold hit.”

And an oilwife smiled sweetly that she “just loved it up here” but added quietly that “we’re here only for two years.”

But the majority are enthusiastic. In the towns, they have the usual amenities, groceries, stores, services, hunting and fishing. I heard of a bank manager who began writing transfer letters the week he arrived. By the time the transfer came two years later, he was so fond of the north he quit the bank and went into business for himself.

Looking into the future, some are as optimistic as the hotel janitor was pessimistic. George Houswood mentioned this as we drove past a road sign, “Hines Creek, 20 miles,” while we admired Boundary Lake.

“They’ve found iron at Hines Creek. Nobody knows how much yet, but it’s a lot, I guess. It’s got people dreaming about the future.”

Some of their dreams are wide-screen and full color. Any place with cheap hydro where iron and oil are found is certainly ripe for rapid industrial development, they reason. And Imperial Petroleum has already started digging the diversion tunnels for a vast hydro-electric power project on the Peace River at Hudson Hope. Maybye, sometime far off in the future, say the optimists, there’ll be another Pittsburgh here.

Well, there’s no harm in dreaming. The explorers, trappers, loggers and pioneers who built this land were, of necessity, as dreamers. And now, in the oil and gas fields anyway, some of their hopes and dreams are coming true.
It was one of Vancouver’s most fashionable June weddings of 1963—but now some 300 reception guests wondered where on earth the bride, groom and their entourage had got to after they left the church.

The bride herself supplied the answer when the missing troupe turned up behind her beaming father.

“Daddy,” she told her friends, somewhat annoyed, “insisted we get his car passed at the testing station before he’d let us borrow it for the honeymoon.”

And so Daddy’s brand new Cadillac had led a procession of wedding cars—honking horns, bunting, flowers and all—to Vancouver’s motor vehicle inspection station for the windshield sticker that made the wedding legal in every respect.

Most appreciative among the chuckling guests was an old family friend named Harry S. Gray, a towing man of 56 with a patient gaze and humor-lined face.

The testing station that checked out Daddy’s convoy is a model of accident-prevention measures. And it’s famed throughout the world. The man who has run it for nearly 24 years is Superintendent Harry S. Gray.

His customers are governed by a city bylaw that demands that every motor vehicle registered in B.C. and used on city streets must pass a fitness test twice a year. Unlike the father of the bride, half of the motorists (about 60,000) must be reminded of their duty and sometimes summoned to appear. The rest turn up on time or even before their time.

For $1.25, they can keep their vehicles in good shape by discovering and correcting defects before they get worse, check out a used car they hope to buy, verify work done by garage mechanics and, sometimes, literally save their lives.

Tourists often use it to make sure their car is safe before continuing a journey. Lower Mainland drivers sometimes use it to check their steering before they tackle the awesome drive through the tortuous Fraser Canyon.

They follow their car through the tests with all the apprehension of expectant fathers—and sometimes it brings out the beast in them when it’s rejected at the far end. When one motorist’s car was recently turned down for a minor defect he grabbed some tools and smashed the windshield.

“Three!” he crowed triumphantly to the startled inspector, “You can keep it!” and stomped out of the building. Next day, calmed down and thoroughly embarrassed, he arrived to claim his car.

“I’m sure his wife caused him to do that,” says Gray. “When I phoned to tell him to take it away I could hear her nagging him in the background. And she was in the back seat when he went through the tests.”

The Vancouver testing station has weathered a few such stormy motorists and considerable early criticism since it opened on March 6, 1939. Today it’s an accepted institution among Vancouver drivers. “Year by year,” says George Lindsay, superintendent of motor vehicles, “the station has gained a greater measure of stature and importance.”

The station’s a battle-proven weapon against accidents. It has reduced the number of Vancouver accidents attributed to faulty vehicles from seven to one-half of one percent. Elsewhere in B.C., where there are no compulsory tests, 8.7 percent of accidents involve defective vehicles. The national average is nine percent. And yet, though other Canadian cities and provinces have examined and praised it, none has gone

Harry Gray has run Vancouver’s motor vehicle inspection station for nearly 24 years.

Imperial Oil Review, December 1962
any further than held purely voluntary tests. 

Exhausts have come from many parts of the U.S. and abroad, and Harry Gray has spread the testing gospel in talk for all. Yet only Auckland, New Zealand, after an inspection trip by a city official, has actually set up a similar motor vehicle testing station.

Like most good causes, Vancouver's testing station had to have a champion. He was the late Mr. Crown, a Vancove
r city alderman and a member of British Columbia's legislature. In 1936, Vancouver was feeling the effects of the rising num-
er of cars. Many accidents—especially those involving pedes-
trians—were blamed on faulty brakes. Skid marks told the
tale: cars were trying to stop, on one-wheel brakes.

In council, Crown led a demand for a traffic survey, 
instrumental in bringing in Earl J. Rodger, chief traffic en-
gineer for the National Safety Council in Chicago, who re-
commended the present safety check.

The provincial government was then building a new motor vehicle licensing branch. Crown persuaded the government to tack an annex onto the rear of a traffic testing station. The city would rent the annex and run the testing station until the provincial government was prepared to take over.

As superintendent, the city named John Murdock, a former police chief in Vancouver's Point Grey district. Murdock asked for an assistant and the police loaned him clerk-corres-
tendant Harry S. Gray. The latter took up his temporary post as staff-arranger under Murdock. Six months later Murdock died and Gray became superintendent. His latest temporary job has lasted nearly 24 years, so has Vancouver's first permanent agreement with the province.

Gray is now a full-time civilian and only his supervisors and inspectors are uniformed in overalls in blue or white. Tests for a large vehicle like a F630 (20.000 lb.) vehicle is a job taking 1.6 hours in an average 1940-1944 job (the high is 1.73 hours, the low 1.200). Total staff is more than 50, and the station, which is self-

The 3,200 vehicles it handles each year are inspected and tested. A 1940-1944 is the only one that the Van-

Vancouver Traffic and Safety Council as an annual city grant. Local safety officials are staunch supporters of the station.

By statue, a vehicle is defective when: (1) plate is torn, windshield wipers, glass including windshield, tail light, stoplight, reflec-
tors, signals, mirrors; (2) headlight, clearance light and additional (tailight); (3) front wheel turns or toe-out (by driving over a groove); (4) steering mechanism for 60 pounds defect, exhaust system, tires; (5) foot and hand brakes, and body parts (driver's seat, body posts, mudguards and sprayguards).

Testing equipment is basically the same as in 1936, although Gray and his men have added or designed new versions of some instruments. Brake testers, made for less-demanding volumes of ordinary garage work, were adapted to withstand nearly 2,000 pounds. This is done by having the Gray designed in hydraulic valve for the tester so it could be used on either cars or trucks. Vehicles are braked on the tester's steel platform at eight mph and four data indicate the braking energy of each wheel.

Tests now take less time (about nine minutes, although there's sometimes a lineup in peak periods) because testers punch their work out.

The card is sent through a machine punchcard system which pictures the history of each vehicle for follow-ups and re-
calls. Gray's inspector files (based on vehicle registra-
tion numbers because license numbers change each year. New car owners are registered at the time of the car, but by B.C.'s

First, more than 60 percent of the vehicles failed the tests, often because of several different defects. "We found headlights aimed at the top of telephone poles or into manholes," recalls Gray, "and sometimes we noticed a match to find the light itself."

Broken king pins were common among trucks. Gray remembers one steering wheel that took three full turns before it moved the wheels. A car ordered in by police passed only the viability test (which was in good shape), everything was either missing (horn, wiper, taillight, stoplights, headlights, muffler, hand brake and rear-

view mirror) or damaged so (steering, footbrakes, tires). And the driver had neither license nor registration slip.

Now, on an average, one vehicle in three fails its first test, mostly because of poorly aligned headlights, a fault common even in new cars. Next of 17 possibilities come faulty brakes, steering, stoplights, mufflers and exhaust systems (not neces-
sarily in that order). Of 128,876 tests during a six-month per-

improvements in the station, the success of the safety drive, and the growth of the motor vehicle population. But Gray feels there is much more that can be done.

Following is an example set by Vancouver. Gray gives older shields as well to cities who hold that vehicle tests are only a minor cure since 99 percent of accidents are caused by drivers. Every year in Ontario defective cars kill 100 people and injure 2,200 others. Gray thinks it's very important to erase that factor as Vancouver has done. Statistics don't show how many lives are saved by "preventive maintenance."

From all evidence, though, it won't be long before Van-
couver has company. In the U.S., 17 cities and 13 states have some form of compulsory vehicle tests and legislation is pend-
ing in other states. Manitoba, edged on by police, the Winnipeg Safety Commis-
nion, has a system under study.

The B.C. Safety Council has a brief before the provin-
cial government urging that testing stations be set up through-
out the province.

The city of Vancouver itself— which for years has been after the provincial government to take over its station and expand facilities—has now allotted $435,000 for a new eight-station line-
test that can be expanded to 12 lanes in 20 years, and it aims to keep the present station operating as well.

But Gray's unwritten textbook on how to operate a motor vehicle testing station can't be followed elsewhere. Says Gray: "You've got to have a system that works."

In Oregon, the city of Portland's testing station called vehi-
cles in for inspection by posting their license numbers and test period on poacher poles. Most people left it until the last day. The line of waiting cars outside the test station was two miles long. Inside were exhausted employees, frayed tempers, over-

"Traffic is showing tremendous growth and the problem is running ahead of the station," Gray says. Starting in April, 1958, a new section of the station is being erected to meet increased demand. The new part, which will open next month, will include a state-of-the-art station.
By Constance Murgall

In 99.9 percent of Canadian homes the child who deliberately smashes his toys gets a hard word and a hard wallop from his mother. But small types in a score of Ottawa homes methodically demolish their playthings to parental nods of encouragement. Indeed, Mummy often sits by, avidly taking notes.

These are the toy testers' families, and in the last 11 years they've made notes on about 600 made-in-Canada toys—a good proportion of the $20 million worth of toys that less objective Canadian parents will have bought by the end of this year.

The 18 women of the Canadian Toy Testing Council are all unpaid volunteers. Their children, their friends' children and groups at schools and hospitals give the toys a trial run. But the testing technique is more scientific than urging Johnny to jump up and down on his teddy bear. Their methods include mechanical and chemical tests, and they set up their own standards.

They're not simply an aggregation of earnest housewives either. President of the Toy Testing Council is Jeanne Pouce, whose look of slightly harried domesticity belies the energy and efficiency with which she runs the organization. She is a librarian, mother of six, and wife of an aeronautical engineer with the National Research Council. With her on the Council are a child psychologist, chemist, physicist, bacteriologist, librarian, economist, high school teacher and radio freelance writer. One way or another they have all the necessary skills to do a professional job of design consulting, market analysis and product testing.

"If we're not experts ourselves, we have husbands who are," says Mrs. Pouce. "We may get a friend or a husband at the NRCC or the Public Works labs to apply a toxicity test to crayons or the paint on a baby's toy. Or he may recommend a way to strengthen the weak point on a dump truck."

The toy testers began in 1952, a month after Christmas, as a committee of the Consumers' Association of Canada.

"We were fed up with Christmas shopping," says Mrs. Pouce. "We weren't getting value for our money. The cheap toys fell apart and the storey ones were too expensive. Toys are important. Playing is just as serious to a child as work to an adult, and he needs the proper tools to develop his body and brain. We hoped to influence the manufacturers to make what we want."

They think they've had some success. They've tested many Canadian toys—made since then, recommended improvements to the manufacturers and publicized their findings. They've had the co-operation of many manufacturers, too, although the latter are under no obligation to either submit toys or make the suggested changes.

The Toy Testing Council has also:
- Set up a special testing program for toys for handicapped children.
- Stocked with toys a children's waiting room at Dorval International Airport and been asked by the Department of Transport to do the same at the new Toronto-Carpet.
- Worked with Central Mortgage and Housing Corporation to draw up plans for a child's house of play and adaptability which can be made by a handy father or by a lawyer for his boy's assembly.
- Collaborated on a pamphlet, "Equipment for Outdoor Play," with the Department of Health and Welfare.
- Suggested toys to fill gaps in Canadian production. Some, like, lumberyard dominos, checkers and chessmen, have been manufactured and proved a success.

Two years ago they broke away from the Consumers' Association of Canada, and got their first grant, $1,000 from the Department of Trade and Commerce. The money has paid for transportation and baby sitters, previously paid by the Council members themselves when they travelled. The publication of a Toy Buying Guide of all tested toys, still on the market, is the next design, the writing up of a new science division and an historical toy collection are to be started through a grant from the National Design Council.

Each year the toys to be tested are selected from the Canadian Playthings...
Manufacturers' annual toy fair in Mon-
treal. A delegation of testers looks over
about 300 toys, and asks for samples of
about 100. Usually they choose new un-
tested toys, new versions to be compared
with old favorites, or items they feel are
potentially dangerous.

The manufacturers denote six of each
selection and the Council meets to ex-
amine, discuss, and distribute the samples
for testing. Today's test is a nursery school,
the playgrounds of a hospital, the home of
an only child aged three or a family with
eight young children aged 11y to 12.

Nursery school and kindergarten
teachers, and play therapists in two
Quebec hospitals, are enthusiastic testers.
High school art classes try new art mate-
rinals. The potentially dangerous toys get
a limited-use test from the tester's own
children or from the weens themselves
in simulated play conditions. The Coun-
cil once tested a train fuelled by a gas that
condensed to a liquid corrosive enough
to scar a child's hands. They also found
an inviable writing set containing tho-
cyanide, unsafe when inhaled.

After a month to six weeks of rugged
use, the toys come back to the Counsel, accompanied by a consumer
evaluation sheet. Form: good, simple
and uncluttered? Color: clear, bright,
it stimulate constructive, creative,
physical activity? Was it used in a way
other than manufacturer intended?
The Council examines the evaluation
forms, the effects of wear on the toy,
and results of any other tests they conducted. They rate the toys (Goody,
Recommended, Acceptable and Unacceptable) and send their report to the manufacturer.

If a toy fails its tests but could be
acceptable after some modifications, the form merely
reads "rating withheld." Along with the ratings go recommendation
for improvement: "Widen the wheel base so wagon won't tip," or
"The wheels come off. Try open-top glider," and often, "It could be improved
by better quality paint and wood and fit of pieces.

In one case a rubber company pro-
duced some building bricks which de-
lighted the toy testers and their children. They fitted well, made attractive build-
ings—but they cracked at the corners. The Council suggested the manufacturer.

The company made the change, re-
subressed the more flexible blocks for a
long test, and still sells them as a popu-
lar item.

A wooden duck pull toy made by
Maiba Toys, a new firm in the Marlieses,
was amasing and attractive, but the head
came off to expose a dangerous pointed
scow and the eyes were rubbered, easily pulled out. With recommended
improvements the duck passed its test,
won a Design Council award and was
the beginning of a thriving toy making
business.

This year the testers concentrated on
plush toys, as well as the tests on model
and plastic toys. Physicist Ann Bred and her
committee applied hot air and direct
flame to the interior and exterior mate-
rals of every plush toy they could lay
their hands on. Their concern with flamm-
bility was aroused by the death of a
CAC member, Mrs. A. R. Morfey, the
sleeve of her brushed fibre housecoat
caught fire when she was leaving over
her cook stove to prepare breakfast.
An investigation showed that the fabric was
normally used to cover babies' plush toys.
The testers found that hot air had no
effect, and direct flame only caused slow
smoldering, on the soft toys of four
major manufacturers. They are continu-
ing their experiments with the toys of
smaller, less-known firms.

Tester Isabel MacKenzie did special
research on chemistry, physics and
anatomy sets from the U.S. and England
(bone are made in Canada) when a
Trade and Commerce official suggested
manufacturers might like to know which
science toys they could produce with
present facilities. As a chemist Mrs.
MacKenzie, now the mother of three,
had set up procedures for testing like
tests on steels from Mines in Arle-
kon.

Mrs. Joyce Graham, Council vice-
president and mother of four, tests most
of the toys for the handicapped children.
Her M.A. in psychology is based on work at
the Institute of Child Study of the Uni-
versity of Toronto. She runs a nursery
school in Burlington, Ontario, and now
weeks five awarces a week at the Re-
habilitation Institute in Ottawa, three
mornings as a consultant to the Child-
ren's Aid Society.

Since toys for handicapped children
are a small part of the market, play-
things aren't usually designed for them,
but sometimes slight variations of stand-
ard toys make them suitable for the
handicapped. Mrs. Graham pointed out
that a small bell inside a large one made
a sound intriguing to blind children.
Plastic domes could be made with
raised dots for the blind, and big
enough for the cerebral pilled to pick up. Some
her suggestions made such toys more
attractive to normal children too, the
manufacturers adopted them.

Manufacturers are enthusiastic about
ideas and recommendations of the Toy
Testing Council. "They can make a toy
more playable," says Moe Smith, presi-
dent of Leo Toys in Toronto. "Their
comments are constructive. We get a lot
of ideas from them."

"They're thorough, fair and impos-
tial," says Harry Addiske, sales man-
gager of the Reliable Toy Co.

The Canadian Toy Manufacturing
Association unoffically encourages
members to use the toy testing services—
and many do—but doubts if the ratings
affect sales. "The public cares about
them," says Moe Smith.

Nevertheless the toy testers try to
publicize their findings, through exhibi-
tions (a pre-Chrismas show with the
National Design Council drew 20,000
in Montreal, Toronto and Ottawa last
year), radio and TV talks, public meet-
ings sponsored by Herne and School or
Women's Institutes, and their Toy Buy-
ing Guide.

The pre-Christmas CAC Bulletin gives
its middle pages to the Toy Buying
Guide, which lists all the toys rated in
the past year as Good Toy, Recommend-
ed and Acceptable, with age suite, de-
sign notes and price. But the Bulletin's
circulation of 27,000 is limited to mem-
bers of the CAC, business members of
their schools and women's associations.
Sepa-
rate copies of the guide are not yet
available.

Moreover, unless they are dangerous,
rejected toys are not mentioned. The manufacturer receives a confidential
report but the Council feels that publica-
tion of a negative report might affect
sales and bring on a lawsuit.

So far, the manufacturers seldom ad-
vertise the tester's rating themselves and
the Council provides no stamp of ap-
proval. Nevertheless the Council feels it
is making progress with the manufactur-
ers, and among its members. "Our sug-
gestions are a lot more practical now
they were 10 years ago," Mrs.
Povey says.

And the real testers—the children—are
having a ball. One veteran tester of five
used his "slow and soft" period at
kindergarten to demonstrate the non-
durability of a plastic toy.

"You see," he explained, dragging
from his pocket a series of plastic faces
meant to fit together and form a token
pole, "the legs are all broken." Addi-
itionally he added serenely: "This is a bad toy."

by Robert Childerhouse

What every young skier should know about equipment, the gelandesprung
and how to crash a tow line

Skiing is a downhill sport. In that
simple statement lies the essence of its
indefatigable charm. A contrariness sits you
to the top of the hill, and you slide down.
Skiing is easy, especially if you have
never skied. Skiing is grace, poise, balance. It
is poetry out-of-doors, a ballet on snow. It
is speed. Spasmless powder snow trailing back, the Fleching
rapier ski poles stab the slope ahead and Zipt. . . A gelandesprung.

"Let's take up skiing."
"I said.

"Why?"

"My wife is beautiful, intelligent, and charming, but given to many words she is not.

"Because," I explained contrarily. "Ski-
ing is grace, poise, balance. It is poetry out-of-doors, a ballet."

"Forget it."

My wife has, along with her charm, a
drafting approach to things. We
couldn't afford the equipment she
said. Assuming responsible quality, the
essentials in ski equipment, clothing and
accommodations, amount to $130.

Estimating $300 to get wife and old
man dressed and on the mountain, we
were obliged to take the long view. We
saved up.

The annual ski sales helped. At the end
of the season, most ski equipment is
reduced in price by 15 to 30 percent. Choice
may be restricted, but bargains are there.

THEY LAUGHED WHEN SAT DOWN TO SIX

Imperial Oil Review, December 1962
The thing about skiing is, anybody who can...
one way or another!

WHERE TO DRIVE FOR WINTER SKIING

- [Vail, Colorado]
- [Ski season, one mile west, has seven runs, snow-making machines, night skiing facilities, lighted lift, night skiing]

- [Red Sky: Loomber-Bentley Ski Resort, seven miles west, has eight runs, snow-making machines, night skiing]

- [Guest Town of Island Head, one mile west, is on the coast, has snow-making machines, night skiing, lighted lift]

- [Crystal Peak Cross Country Ski Club, one mile west, is in the mountains, has snow-making machines, night skiing]

- [Mount Washington: Ski area, one mile west, is in the mountains, has snow-making machines, night skiing]

- [Silverton: Ski area, one mile west, is in the mountains, has snow-making machines, night skiing]

- [Mount Evans: Ski area, one mile west, is in the mountains, has snow-making machines, night skiing]

- [Breckenridge: Loomber-Bentley Ski Resort, seven miles west, has seven runs, snow-making machines, night skiing]

- [Red Rock: Canyon Ski Hill, seven miles east, has three runs, snow-making machines, night skiing]

- [Guest Town of Island Head, one mile west, is on the coast, has snow-making machines, night skiing]

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