The Willing Hired Hand

April, and the land is stirring again. Farmers are tuning up their mechanical farm Jack-of-all-trades—the tractor. A familiar sight; so familiar that we often forget it is the symbol of an agricultural revolution.

Thirty years ago a Canadian farm worker could expect to manage 100 acres; today, the same man can work more than 200 acres. Canadian farmers’ cash income is three times as great today as it was in the Twenties, and 10 times greater than it was in the Thirties.

This increased working ability and its resulting increased productivity and greater personal wealth are due largely to the mechanization of Canadian farms and the availability of improved petroleum fuels at prices that have risen far less than almost any other essential commodity.

The average prairie farmer today uses some 1,500 gallons of farm gasoline a year. That gasoline is used in many ways, but for the same end—to produce a crop, usually of wheat. What will that wheat buy? Well, it will buy gasoline for one thing. And today it will buy more than ever before.

In the Twenties a bushel of prairie wheat at Fort William would buy about 4½ gallons of gasoline. Today it will purchase better than eight gallons. In terms of wheat, the prairie farmers’ gasoline is almost twice as cheap as it was before the war.

The western oil developments, large capital investment in new refineries and equipment, continuous product research and a ceaseless competition between oil companies for new oil fields, better products and more customers, have all helped to maintain oil products as one of the farmers’ most valuable and cheapest tools.

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Watch Out for Scouts!

by EARLE BEATTIE

Secret wildcats are fair game for all scouts — quick-witted, versatile men who keep their companies informed of competitors’ activities in the keen search for new oil fields.

During the recent “hot land play” in the Pembina oil field, southwest of Edmonton, one company took unusual precautions to keep its wildcat drilling results secret. It kept the crew on the site throughout and flew in other personnel and all materials by helicopter. When drill cores were flown out, only top men in the company saw them.

The company was making absolutely sure that results of drill tests did not leak out to an unknown number of quick-witted oil scouts ranging the area, all working for competing companies and all seeking information that would give their companies an advantage in the search for new oil fields. If a scout got wind of favorable results, this information would give his company a considerable competitive advantage, either in leasing acreage in the vicinity, or determining how high to bid on crown land.

Such tell-tale scraps of information don’t necessarily leak out to the scout himself. They may filter through in chance remarks to one of the scout’s contacts in the hush-hush area: to a farmer, a garage mechanic, cowhand, truck driver or hotelkeeper.

Who are these “private eyes” of the oil industry and what role do they play in Canada’s wildcatting career? Little known to the public, but legendary in the industry itself, they’ve been called “legmen”, “intelligence officers”, “the eyes and ears” of oil exploration and “cloak-and-dagger” men. Today, for all companies, there are 72 field scouts in western Canada. Hundreds more are in offices. Their job is to find out what competing firms are doing in the search for oil and to report back to their own companies as quickly as possible so that, if necessary, it can take fast action to maintain its competitive position.

The legendary side lies in true stories of old-time scouting with coonskin cap and muzzle-loader, fights, bribes and sundry stratagems when scouts penetrated competitors’ ranks disguised as truck drivers or spies from forest coverage on heavily-guarded well sites. Most of this lore springs from U.S. scouting experiences, in the heady Eighties and Nineties of the last century, when scouts led rough lives, working at night, hiding in the brush and often risking shots fired by angry guards.

One U.S. oil scout, S.B. “Stu” Hughes, secured advance information on a sensational Pennsylvania well by lying for 18 hours under the floor of a derrick. Another scout and his partner crept up to a well one night, raised the tools and measured the cable—the tools were dry. Their report of a “cluster” had a quick effect on the jittery oil market of those days.

In Canada, where western oil fields were developed in this century, scouting lore centered for 18 years— from 1930 till 1948—on George Jones, now semi-retired in Calgary. A wily, energetic man, Jones vividly exhibits two characteristics of the old-time scout: a sense of the dramatic and a tight-lipped attitude toward information-seekers. In conversation he uses expressive gestures, often leaping from his chair to act out a...
role, but he "clamps up" from force of habit when it comes to talking details. These personality traits stem from years when he was the only scout in Canada. He started with Imperial in 1926 as a cook, worked as a rodman with a geology crew for a while, then went into general field work, which included scouting. "I started scouting on a horse," he says. When he took to a more modern contraption, the automobile, it was to drive 35,000 to 40,000 miles a year. He had to; he was combining surface geological investigations, land leasing and scouting in one role. Once he ceased a whole day on a sandwich. As he fixed a tire in the southern Alberta badlands he keeled over, unconscious. Coming to a few hours later, he finished fixing the tire and drove on.

Old-time scouting with coonskin cap and muzzle-loader.

Veterans of U.S. scouting where always surprised at the size of his territory. Visiting Shawnee, Oklahoma, in 1945 to attend a scout meeting, Jones was introduced as "the oil scout with the biggest territory in the whole world—the man who has all of Canada to scout." At this, a tall scout with a southern drawl rose from his seat and asked: "Is that all as big as Texas?"

Besides "all Canada", Jones scouted U.S. oil fields in Montana, near the Alberta border.

In his earlier horseback days, Jones travelled for miles on remote, backwoods roads to visit drilling rigs. Maps were not quite as accurate then as now, but he soon discovered a sure-fire way of finding out if he was on the trail of the rig. Every so often he would pull the horse over to the roadside and scan it for beer bottles. That was before crews had become the "family men" they are today and an empty bottle was a good signpost.

Arriving at one of these remotely-located rigs one day, Jones gathered up a bottle, a small sand and shake from the shake- shaker to inspect it. As the toolpush approached him, he quickly thrust the handful into his jacket pocket. But he'd forgotten there was a hole there and as he clattered jovially with the "push", the filled sample kept dribbling out of his pocket.

"I don't think he ever knew what was taking place as we talked," Jones recalls, "but every grain of sand that fell sounded like a big rock to me."

In those days the oil scout often got rough treatment if he were caught. And that was not entirely in the "long ago." Hector McAllister, big Scots-Canadian field scout in the Regina district for Imperial, remembers one scout who boldly mounted the platform of a drilling rig to gain information. A few minutes later he crawled out of the black, greasy water of the oil sump where the rig's roughnecks had pitched him.

All this was in the cloak-and-dagger tradition. Today, the dagger is gone, but the cloak of secrecy has not been cast off. Oil scouting can now be compared to football scouting which also passed through a rugged stage where scouts were roughed- up for plying on rival team practices. Now they're tolerated and sometimes have special seals for them; but each side manages to conceal its big, surprise plays in a tight situation.

Similarly, oil scouts in the three prairie provinces scrutinize each other's routine geological, seismic and drilling operations. It would be economically impractical for any company to maintain a scout force big enough to keep check on every well, seismic or land operations in the west. So, once a week, scouts from 34 companies, including Imperial, gather at Red Deer, Alta., for a "scout check" in which they exchange basic information that is of no momentary strategic value. Manitoba and Saskatchewan men meet in Regina. The information they exchange could become available later from government reports compiled from information which by law has to be filed by operating companies.

As the bull scout, who's elected annually, calls out names, the scouts rise to report on their company's operations—but they can hold back special information by declaring any wildcat drilling to be a "tight hole." (When a well—usually a wildcat being drilled in unproven oil territory—is declared a "tight hole", information about it often is not even available to company officials until the company's land position is assured or until the hole proves to be dry.) Through the scout check a scout can barter stray bits of information to help his company get as complete a picture as possible of competitors' activity, save himself long, needless hours of work and so get more time for special investigations. With the words, "tight hole", he can pull his秘密 cloak back over his shoulders.

A "tight hole" declaration, however, doesn't thwart rival scouts. On the contrary, it starts them rushing to the area with notebook, binoculars and persuasive techniques. They revert to the "lone scout" tradition and call on the lore of old. He, as George Jones, puts it: "It's still nice to go out and run swab on someone." Running swab is the scouts' jargon for scouts' fieldwork.

The cross-country ramblings of a field scout and his casual notebook sightings may seem somewhat gypsy-like to the observer, but his movements fit into a precise pattern. At Imperial he's a member of the scouting department of the western producing division, with headquarters at Calgary. The department is headed by division scout M. J. Huffman, known as "Jack" to his associates.

The field scout works directly for one of four district exploration offices with a district scout in charge: Edmonton district, which extends from Athabasca to Calgary; Peace River: Regina, which covers Saskatchewan and Manitoba; and the southern Alberta district, from Calgary to the U.S. border.

The district scouts report daily and weekly to the scouting office and they, in turn, receive information that can be used locally. Their first responsibility, however, is to keep the district exploration manager informed on what individual competitors and the industry as a whole are doing.

Versatile, fast-moving and knowledgeable, the field scout gets to know his district like the back of his hand. "Rather than have an individual concentrate on any one phase of scouting," says Huffman, "we prefer to have each of the field scouts trained in all aspects of scouting." That means seismic, deep-hole and land scouting. To his knowledge and techniques he has to add personality and ingenuity if he's to bring back the needed information.

One story scouts like to talk about concerns a young scout's canny knack of making friends to get results. He found a rig surrounded by a barbed wire fence with a small bridge over a creek as the only entrance. This was guarded and the scout could get nowhere. But he struck up a friendship with a crew member one evening and was told: come back to the rig in the morning. When he found the bridge still guarded he was about to leave when his new-found friend spotted him. The friend yelled, "Get out of here!" and started leaving rocks at him, much to the amusement of the guard and drilling crew. What they didn't know was that the rocks were samples of core from the hole and these were just what the young scout wanted.

In seismic scouting, the scout's personal dictum is "Follow that crew!" He gets to know what company and what crew is doing the seismic "shooting" by noting the small colour flags put up along the roadside to mark shot holes. He may follow
The glamour queens of ancient Greece and Egypt used strange-looking odd-named concoctions to decorate their nails. But what about our modern misses? They depend on a high explosive and petroleum.

There's an old Scottish proverb that says, 'Nothing is got without pains, but an ill name and long nails.' A good proverb, but obviously not originated by a woman. Ever since women realized men were looking for something besides good looks, they have been cutting, trimming, shaping, polishing, and dabbing the little bits of horn at their fingertips.

So anxious is the modern miss for tinted talons that her efforts are the basis for North America's multi-million dollar nail polish industry. In the United States, for instance, women spend $22 million a year painting their nails every color of the spectrum. In Canada, the average woman spends $5 or $6 a

from crude to cuticle

by Ruth Johnson
year on cosmetics, which include two bottles of nail polish.

While women in the past have used some strange-looking and malodorous concoctions to change the shades of their nails, they are no stranger than some of the essential ingredients of the polishes used today—high-explosive and petroleum. Strange bed-fellows indeed, for milady's fingernails.

Fingernails are one of the first parts of the body to be formed, for the human embryo is only nine weeks old when the skin of what will be the fingertips begins to thicken into nails. They're perfectly formed by the 12th week and have grown out to the ends of the fingers by the eighth month. After birth they grow at the rate of one millimetre a week, four times as fast at toe-nails which manage only a millimetre a month. Only the root or matrix of the nail is living tissue. The body or nail plate rests on true skin—the sensitive part we usually call the quick—but is not itself alive. Just when women first plunged their fingernails into a pot of paint is anybody's guess, but the ancient Greek women stained theirs with lac or henna to give them a redish color. They were by no means the originators of the habit for the Egyptian Queen Hetepheres—whoson built the Great Pyramid in 3,000 BC—was quite a glamorous girl.

Her tomb contained a wonderful assortment of toilet articles:

Every little girl is fascinated by mummys nail polish!

manicuring implements of gold, copper and flint—such as a metal orange stick with one end sharp and the other rounded, exactly the same as we use today—and three gold and four bronze manicure knives. The henna dye she used on her fingernails came from a shrub of the privet family; probably the same as the one referred to in the Song of Solomon as campith. The leaves and small stems were cut and made into a paste with hot water, then allowed to remain on the nails overnight. The resulting stain was good for a month. Henna-colored nails were so common amongst the early Egyptians that a woman thought herself indecent without them.

Archaeologists in South America have dug up cosmetic kits not unlike those of Queen Hetepheres. Hyatt Verrill describes the mummy of a Peruvian pre-Inca princess of around 500 BC: she had a modern-looking gown of white lace, bobbed hair, puckered eyebrows, rouged lips and cheeks, tinted finger and toenails. "Moreover," says Verrill, "among the belongings buried with her was her vanity case of beautifully woven woolen thread. Within it was a powder puff of soft feathers, a tube-like scot powdery filled with dried-up crimson lip paint and a silver spangle for applying it. Another container held black pigment for the eyebrows, another rouge and, in addition, a keen-edged bronze nail knife, a hardwood cuticle stick and a pair of pliers for removing superficial hairs."

Some, like the Mocheans of Peru, did not bother painting their nails—they wore a thin sheet of beaten gold on them. Long nails were a sign of distinction in many tribes just as they are in China.

The Chinese carried the fad of long nails to absurdity. Men and women of the wealthy and literary classes let their nails grow as long as possible as a sign they need never work with their hands. A three-inch nail had to be protected, of course, and so silver or gold sheaths were the answer. The Royal Ontario Museum in Toronto has one in its Chinese collection. It's about four inches long, including an inch of thimble for the end of the finger. Made of silver gilt and engraved and embossed plum blossoms, it is set with coral, pearl, jade and emerald chips.

While the "Sun King", Louis XIV of France, is not noted for his fingernails, he is reported to have found a use for his nail pruners; he sold them to fill the state treasury. The ladies of his court, however, went in for fancy nails and even went unwashed for a week after so they wouldn't spoil the manicure.

In fact, between the 15th and 18th centuries the use of cosmetics of all types boomed. Women enamelled their faces, hands and arms with such concoctions as Lady Molyneux's Italian paste, polished their nails with an oxide of tin and wore "chocolate skin-gloves." These gloves were made of a leather so fine that a pair could be put in a walnut shell.

COSEMICS GO OUT OF FASHION

From rising to great heights (quite literally in the matter of Lair addresses) the use of cosmetics fell off in the 19th century, until by the end of Victoria's reign no lady would dare to have her complexion thought other than natural. A dash of rice powder for the nose, some beet juice or a quick pinch for color in the cheeks, and fingernails buffed to a shine with a powder polish were the most well-bred girl would use.

Rouge and lipstick had a revival during World War I and even after came the invention of liquid nail polish, colorless at first, and made curiously enough from one of the most powerful of all explosives—nitrocellulose. To this was added camphor and two petroleum products, acetone and amyl acetate. In the early Thirties the addition of titanium dioxide and color brought the opaque, high-gloss enamels we know today. Though the base remains nitrocellulose, the latest enamels are infinitely better than the old ones. Plasticizers such as dimethyl phthalate give flexibility; formaldehyde-type resins have improved the lustre and adhesion. All these ingredients are carried by the solvent, which, besides the resin, is often obtained from petroleum too. Mixed with care and precision the resulting product is glossy, forms a good film on the nails, and dries quickly without being sticky.

400 SHADRES OF POLISH

There are probably up to 400 shades on the market—but they're all made from a few basic colors—yellow titanium oxide and dark red iron oxide for opacity, and maroon, yellow-red and blue-red. Even these coloring agents must have specific qualities, such as resistance to light. They must not stain or be affected by soaps or detergents. Modern women like long and decorative nails, even if they do have to wash dishes or pound a typewriter.

In recent years there has been a move away from such exotic polishes as pinks, greens, blue, black, silver and even, rhodas of the (natural) gold. Now the trend is to fewer and more basic shades, with the exoticism and phantasy confined to their names. One company has even dubbed the fancy names and calls its colors simply Pastel Pink, Real Orange, Medium Red and the like—a welcome change that lets a woman know just what she's getting. This company brought out a recent innovation in nail polish—an inkedex color said to come from fish scales and to add to the wearing qualities of the enamel.

It's not only in the enamel that the oil industry makes a contribution to hand care. Cuticle removers, polish removers, and hand creams all have oil or refinery gas derivatives in them. One of their advantages is that they are the most allergy-free elements yet found—and a good thing too, since the unit sales on nail polish are about as the same like a lipstick, the one cosmetic most women would never willingly go without.

Cosmetic products are quite aware of this and all the important brands put out co-ordinated color sets of rouge, lipstick and nail enamel, although none of them makes the nail polish itself. A very few add their own pigments to a manufactured base, but the blending of that base is such a specialized craft that it is left to the experts—in this case not beauticians, but varnish and lacquer manufacturers. Most of Canada's nail polish is made that way and imported in bulk. One major company began operations in Canada this year and now has its own manufacturing plant in Toronto.

However, about 70 percent of North America's nail polish is made by a syndicate, and then packaged and sold by distributors. That doesn't mean all nail polish is the same. Far from it. It is made to individual formulations devised by the various companies and distributors.

The latest development in beauty care for the nails is a petroleum-based plastic that will create a new false nail. Quite different from the old glued-on nail that came off so easily, this new kind is painted on over a paper form attached to a stubby or broken nail. When the plastic sets, the paper form is removed leaving the imitation nail. The plastic nail can be filed and polished and will even grow with the real nail.
Tracking smugglers, counting trumpeter swans, making mercy flights— they’re all in a day’s work for the RCMP Air Division which patrols the longest, loneliest police beat in the world.

The skipper of a west coast fishing boat looked up aghast one summer’s day a few years ago. Swooping towards him, silhouetted against a low-hanging cloud, was a trim little seaplane with an official look about it. Stencilled along one side were the legend MP and the unmistakable insignia of the Royal Canadian Mounted Police.

The skipper’s amazement was compounded when the plane landed alongside and the pilot, much in the manner of a highway patrolman, signalled him to heave to. Two officers climbed aboard, executed a warrant and took custody of a passenger. The man was wanted for murder.

This was another incident in the day’s routine of a small, almost anonymous band of policemen who patrol the longest, loneliest beat in the world. For these were members of that little-known adjunct of the famed RCMP—the Air Division.

In 1955, the last year for which statistics are available, the blue and gold skyhorse steeds of the RCMP charged across 317,288 miles of sky, equivalent to 20 trips around the globe. The flying horsemen are liable to drop out of the skies any-time, almost anywhere in Canada, in seaplanes, skiplanes or landplanes, on missions so incredible they read like fiction.

They’ve taken census of the near-extinct trumpeter swan and showered human ashes on a mountain. They’ve shadowed smugglers, tracked robbers, spied liquor stills, reconnoitered forest fires, photographed disaster centres, dropped parachutists, rescued babies and found bodies.

The swan-counting took place in British Columbia’s Tweedsmuir Park. Ornithologists went aloft with woods-wise RCMP pilots and, cruising low over likely looking areas, hunted for nests. When nests were spotted, the planes would land on the nearest lakes and the ornithologists would complete the work. Government officials said it was the finest job of its kind ever undertaken.

The ash-bombing was in accordance with the dying wish of a civil servant. Staff Sergeant Stan Rothwell loaded his plane with the cremated remains of the man and his long-dead daughter and sister, and deposited them on the slopes of Mount Tweedsmuir, in the Cowichan district of British Columbia.
The aerial vigil for smugglers is a continuing operation. Several times in the past decade RCPM planes have spotted tell-tale tracks on the snow and put ground searchers on the trail of gangs which periodically bring bargained cigarettes and electrical appliances across the United States border into Quebec and the Maritimes. Many a car has been seized simply because it left tire marks on a little-travelled country road.

RCPM planes have doubled as coutrooms, cells, hospital wards and dormitories. Cargoes have ranged from fuel to frozen fish and from mental patients to police dogs. The freight manifest on one trip carried the cryptic notation: “One unidentified corpse.”

There’s nothing dull about this work. Every flight is an adventure. Sergeant R. J. Harris set some sort of speed record in northern Saskatchewan when he was asked to search for a suspected suicide. The search took 30 seconds. During take-off he discovered the man’s body dangling from a tree on the fringe of the pasture that was his landing field.

These versatile policemen-pilots may find themselves doing a lengthy patrol of the Northwest Territories to inculcate or destroy animals with rabies, or perhaps seeking bank bandits, such as three now completing 10-year terms in a federal prison. They’d taken $40,000 from a Saskatchewan bank and got clean away. A police plane was summoned from Regina. Before nightfall it had picked up the trail and guided ground searchers to their quarry.

The RCPM’s first interest in the airplane as an extension of the law’s long arm was fostered by the late Commissioner Sir James MacBrien. As a young general in World War I he frequently mapped his tactics from the air. In 1926, as chief of the Canadian General Staff, he became an RCAF recruit at Camp Borden and started a military pilot’s course.

As early as 1931, a bushplane figured in one of the RCPM’s most celebrated cases, that of Albert Johnson, the so-called Mad Trapper of Rat River. Johnson, a recluse living along the Yukon River, was accused of interfering with Indian trap lines. When the RCPM investigated, he killed a constable, turned his cabin into a fortress, then fled into the Arctic wilderness where he eluded his pursuers for weeks.

Police enlisted a plane to assist in the search and drop supplies to the poises. It was the plane that finally helped the Mounted get their man. It spotted him and made his position known. In the ensuing gun battle, Johnson was killed.

In 1932, the RCAF began conducting air searches for runaways, with RCPM officers as observers. Sightings were radioed to fast patrol boats.

Sir James MacBrien used aircraft extensively. He made his 1936 inspection by air and covered 11,000 miles. The following year the Air Division, then called the Aviation Section, was created. It was equipped with four de Havilland Dragonfly twin-engine biplanes and a hangar was built at Ottawa’s Rockcliffe Airport.

The division’s functions were then, as now, to provide general transportation for all members of the force where time, expense, secrecy or lack of other transportation are deciding factors; to transport prisoners, mental patients, laboratory personnel and exhibits, police dogs and their handlers; to conduct preventive, forest fire and game patrols and mercy flights; to obtain aerial photographs of disaster centres; to supply freight to and from isolated detachments.

Within months of its inception, the Air Division had proved its usefulness. Two fishermen had been missing 48 hours in an open motorboat and were believed heading in the face of a strong wind towards the Gulf of St. Lawrence. A Dragonfly located them and directed an RCPM cutter to the rescue.

With the outbreak of war, the division was disbanded, its men and equipment transferred to the RCAF. But there remained a vital defense assignment, one the government would entrust only to the RCPM. That was the destruction of a string of gasoline caches along the vulnerable Arctic frontier.

The RCPM loaned one of its RCPM pilots and on July 22, 1940, a Norwegian aircraft took off for the eastern Arctic. Six weeks later, after venturing as far north as Repulse and Wager bays, it was back—mission accomplished!

RE-FORMED AFTER THE WAR

It was not until 1946 that the Air Division was officially reconstituted. Today it’s a thriving operation with detachments coast to coast, 11 aircraft and 32 personnel, including 14 pilots. It is commanded by Lieutenant-Colonel Douglas W. Dawson, a 17-year veteran of the force and a wartime RCAF squadron leader.

A Hollywood studio wrote the RCPM recently to enquire about the size and calibre of the machine guns they mount. The tolerant reply was that no fighters are employed; thus, to the studio’s chagrin, no machine guns.

Another correspondent, evidently impressed by the Mountains of the movies, wondered about enlistment possibilities. She had served in the U.S. Air Force and wanted to join the RCPM as a “stenographer-pilot.” The force thanked her for her interest, but explained that all its pilots not only have to be males, they also have to be fully qualified policemen.

The RCPM’s aircraft are probably its least glamorous assets. They’re used as patrol vehicles, as ambulances, as bushplanes and one trainer. Their only armament is that carried in the crewmen’s holsters.

The fleet comprises one Grumman Goose amphibian, two twin-engine Beechcraft transports, four de Havilland Beaver bushplanes, a de Havilland Otter and a Norwegian transport, a Sotoma Station Wagon and a Fairchild Cornell trainer.

For ease of identification, each is named after a bird. The selection of bird types is based on the last letter of an aircraft’s registration. The Norwegian based at Fort Smith, for instance, is registered as CF-MPL. Its name is Loon. Beaver CF-FHJ at Vancouver is Wren. Otter CF-MPP at Churchill is Partridge. The plane that was used in the destruction of the gasoline caches at CF-MLM is Falcon.

These “birds” are scattered from St. John’s, Nfld., to Victoria, B.C., with other detachments at Prince Albert, Winnipeg, Edmonton and the Rockcliffe headquarters.

Each detachment is manned by a pilot and engineer, both of non-commissioned officer status. Many of the pilots are RCAF veterans, but an increasing number are postwar pilots who learned to fly at their own expense. Constables Gordon and Harold Falls, identical twins, joined the force in May, 1952. During their police training each began taking flying lessons until they had earned commercial licenses. Now they’re qualified both as policemen and pilots. They joined the Air Division last year.

Field duty for these men, while inconsistent with RCPM dress regulations, meets the requirements of Arctic survival. It is light, warm and usually follows the time-tested patterns of the Eskimos.

Canada’s skies of the future must be rugged individuals: tough, resourceful, well-seasoned in the ways of the north. Since they regularly operate in country lacking airport facilities, navigation aids and up-to-date weather information, they must be prepared for any emergency. It is significant to note that, in its millions of miles of flying, the RCPM has not had a single fatal accident. There have been some close calls, though.

One plane, attempting a landing on patchy snow and ice in 45-below weather, ground-looped. No one was injured, but the propeller was bent, one engine broken and a wing tip damaged. The crew radioed for spare parts and settled down in a make-shift tent fashioned from wing covers. When the equipment arrived they effected emergency repairs and returned to base.

Another time, when he encountered unreported low fog, the pilot of a Beaver seaplane simply landed on a convenient lake and taxied the remaining 23 miles to his destination.

There was one problem that had the force momentarily stumped: how to cope with the curiosity of natives in remote settlements who rushed out to examine every visiting police plane, and pooled inquiring fingers through the fragile, fabric-covered tail surfaces. A warning was prepared by syllabic language and displayed on the tails. It eloquently simple message: “No Push!”

The Eskimos and Indians are impressed with the white man’s noisy thunderbird, but they’re not convinced—nor are ranking RCPM officers—that it is ready to replace that hardy northern institution, the dog team patrol.

Says Assistant Commissioner E. Rivett-Carnac: “In no way will the use of aircraft replace the dog team and the personal contact engendered through use of the latter means of transportation with the Indians, Eskimos and trapping community in general. But it has proved its great value in the case of emergencies when speed is an essential to cover great distances in the shortest possible period of time.”

The airplane, however, has already done much to improve conditions along the sled trails. It has laid in caches of food and wood, and it has added eggs and vegetables to the hitherto austere dietes of hinterland detachments. RCPM planes are even used to fly the fish that feed the dogs.
SOME SAY THE OIL INDUSTRY'S MEASURE IS A RECENT CREATION. OTHERS BELIEVE THE TIERCE, IN WHICH THE KNIGHTS OF OLD STORED WINE, IS A BLOOD BROTHER TO TODAY'S OIL BARREL.

BY BERNARD GOULSTON

HAVE YOU EVER wondered why the oil industry calls its products by the gallon, but measures it by the barrel? And perhaps you have wondered too, what was the origin of the barrel as a unit of measurement?

According to the American Petroleum Institute, at one time "all sizes and types of barrels were used to ship oil, size being considered of little importance." This state of affairs was naturally confusing and injurious to the trade, and in 1866, says the API, a Dr. Egbert and some 30 producers at Oil Creek, Pa., announced that thenceforth they would sell their oil by the gallon only. An allowance of two gallons in favor of the buyer was made on each 40-gallon gauge, thus establishing a 42-gallon measure for crude oil which, in 1872, was adopted by the Petroleum Producers' Association as the standard barrel. It was approved by the United States Congress in 1916.

While there may be good reason to believe that is how the present U.S. 42-gallon barrel came about, there is also another, and far more romantic, explanation. An explanation that still leaves the origin of the barrel shrouded in the mists of antiquity, but explains why a barrel in Canada consists of 35 gallons and in the U.S. 42 gallons, and leaves both holding the same amount of oil.

There is a record of an English grocer who, as long ago as 1379, received a consignment of "ressyns and corenes, one barrel," and mention is made in the Wycliff Bible, 1382, of "an hundred barrels of oil" (Luke 16:6). Throughout the Middle Ages the barrel was a common measure for liquids and dry commodities which included such diversified materials as soap, corn, wine, eels, gunpowder, but the capacity of the barrel might differ according to the merchandise measured.

Even today, in the United States, the barrel employed to measure cranberries is 5,826 cubic inches capacity but that used for other fruits and for vegetables is 7,056 cubic inches. In Imperial's Sarnia refinery at one time the barrel was reckoned at 50 gallons because that was the actual capacity of the drums then being made.

Then there is the old British Table of Measures which, starting with the gill, jubilously plodded its way through such colorful units as the anker, the mallet, the tierce, the hogshead, the puncheon, the butt and the tun. Forty-two wine gallons ancient lineage with perhaps a bar sinister or two on its escutcheon. It was, in fact, in the time of Edward IV (1461-1483) that the barrel was legally established as a measure of fish. Because of its long association with finny fare, it is not surprising that the barrel was adopted by the whale oil trade as the unit of measure, and invoices dated the early part of the 19th century testify to its common use in that trade.

At that time, too, most of the overseas trade in wine was carried in American ships and the 42-gallon wine barrel and multiples thereof were accepted units of measurement in U.S. marine traffic. Towards the middle of the century many whale oil dealers began to sell coal oil, retaining, as a matter of course, the measure to which they had been accustomed. Then, when the manufacture of coal oil yielded to the production of kerosene from crude petroleum the ubiquitous barrel entered the service of this latest commodity.

Whether Dr. Egbert and his associates were influenced by the British Table of Measures in their action or whether the similarity of their barrel and the old wine measure was fortuitous is a matter of conjecture. For ourselves we like to feel that the barrel in this petroleum age has direct kinship with the firkin that served when knighthood was in flower.

Mr. Goulston is an assistant manager of Imperial's research department at Sarnia.

Imperial Oil Review, April 1955
James Miller Williams of Hamilton, Ont. was "a genius at business", said his contemporaries. He was too busy creating new enterprises to notice. For instance, he dug the first commercially successful oil well, probably drilled the first, and built the first Canadian oil refinery.

NORTH AMERICA'S
FATHER OF OIL

by FERGUS CRONIN

A century and a half years ago—in 1857—James Miller Williams, a comparatively young man of 39, decided to dig a hole in the nascent-smelling "gum beds" around Black Creek in southwestern Ontario. That hole turned out to be the first commercially successful oil well in North America. It was the birth of the oil industry on this continent and another first for Williams, one of the most enterprising and dynamic businessmen in Canadian history.

Williams then was already a well-to-do Hamilton, Ont. businessman who had built and sold two flourishing businesses. In the course of his life he proved himself highly capable in many lines of endeavor. He was a manufacturer of carriages, railway cars and tinware, he had an interest in the insurance business and several railways, and served as alderman and church trustee. He also was for 12 years a member of the Ontario Legislative Assembly, and for 11 years registrar of Wentworth county. So it was more likely foresight than good fortune which accounted for the fact that Williams became the father of oil in North America.

He was born of Welsh parents in Camden, New Jersey, on Sept. 14, 1818. He left school early and apprenticed to a Camden carriage maker. In 1840 his family moved north into Upper Canada and settled in London, then a mere village, and there in 1842 he married Miss M. C. Jackson. That same year he started a carriage manufacturing business, and after operating it for four or five years, moved the business to Hamilton.

An indication of his success as a carriage maker is a clipping from the Hamilton Spectator of Aug. 30, 1851, when Williams was only 32. "We should have noticed ere this the splendid new Omnibus recently built for Mr. Davidson of the City Hotel at the Carriage Factory of Mr. J. M. Williams of this city, surpassing in size and elegance anything of the kind ever before attempted in this country."

He sold out his interest in the carriage business and, before oil captured his imagination, began manufacturing railway cars and equipment with plants in Hamilton, Niagara Falls and Brantford. He made the first cars to run on the Great Western Railway which was completed in 1853. Three years later, when the railways began to make their own rolling stock, he sold out once more and soon he was up to the top of his hip boots in the oil business.

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We offer Crude Oil, delivered on the line of the G. W. Railway, at the following rates:

- In quantities of from 1,000 to 4,000 gallons, 20 cents per gallon. From 4,000 to 100,000 gallons, 16 cents per gallon.

J. M. WILLIAMS & CO.,
Hamilton, July 4th, 1860

From the Hamilton Spectator and Journal of Commerce, 1880

A man with an almost uncanny sixth sense for the monetary value of a new enterprise, Williams entered the oil business by buying out Charles N. Tripp, who hauled from Woodstock, Ont. Tripp, but for the fact that he lacked the drive, intuition and ingenuity of Williams, would have sired the oil industry. He was in the field at least six years before Williams; but where Williams succeeded, Tripp failed.

It was Tripp who decided there must be some use for the malodorous "gum beds" and found that by boiling the black muck he could make a fair grade of asphalt. About 1851 he formed a company and four years later won an honorable mention for his asphalt at the Universal Exhibition held in Paris, France.

Tripp's operations, however, were not financially successful and late in 1856 he sold out to Williams. Tripp had holdings in many parts of southern Ontario, most of which came under Williams' control, and Tripp became Williams' employee. Not satisfied with obtaining oil out of surface gum beds or seepages, Williams found that by digging and drilling beneath them, he could obtain oil in a liquid state. He first began operations in 1857 around oil seepages on the banks of the Thames river at Bothwell in Ontario's Kent county.

Tripp and Williams dug down 27 feet without success, until one morning they found the hole full of oil and water. In an attempt to reach the "pool of oil" they tried to drive an iron
pipe down the hole, but when it had gone down a "considerable distance" it broke, and the well was abandoned.

Discouraged with the Bothwell prospects, Williams that year moved to the Enniskillen township in neighboring Lambton county, and started to dig again. The deeper he dug, the more oil he got. He reportedly went down to 65 feet, stopping when he came to rock. From this well and from others he and other pioneers dug in the gum beds, from five to 100 barrels of oil a day were taken. The wells and the log building and shacks which grew up around them were first known as Black Creek but later became identified as the Enniskillen Oil Springs, then simply as Oil Springs.

It was there on the south bank of Black Creek, that Williams built the first oil refinery in Canada. His first equipment in 1857 was a retort in which the oil was distilled. This elementary distillation produced a comparatively light, iridescent liquid which was sold as lamp oil. Others before him, including Tripp, had attempted to process the "gum" by simply boiling it in iron pots and using the thick residue as asphalt. They threw away everything else. Williams was the first to construct a planned refinery and manufacture oil on an organized basis. As his oil interests flourished so did his personal interests in Oil Springs. He was one of four men who laid out the village of Oil Springs in 1860. By 1861 there were 1,600 people there. The following year a daily paper called the Oil Springs Chronicle was started. In 1864, the village was incorporated.

Thomas Sterry Hunt, an outstanding Canadian chemist of the day, wrote in the Canadian National Journal in 1861 that Williams was a genius at business and industrial organization, and especially at choosing able partners. He would have to be, because he and his associates had to be their own chemical, mechanical and civil engineers. They designed and erected their own drilling rigs, tools and refineries with the aid of traveling handymen.

Heavy demands were made on the local blacksmith. There was no supply house to sell them the pumps, valves, rods, tubing and engines necessary for pumping oil from deep wells. All these had to be designed and tested in operation. The early operators had to learn their business through trial and error. But their troubles did not end there. One of their biggest problems, after getting the oil out of the ground, was transporting it out of almost impassable clay trails to the outside. There were no roads to begin with, and the railroad was 16 miles north at Wyoming. The clay subsoil was impervious to water, the whole of Lambton county was flat and the streams were sluggish. The result was that every footpath became a mine, then a succession of pools and drains. Men wore knee-length boots during all their waking hours.

Williams tackled the oil industry in the same driving manner he had handled his previous enterprises. Sometime between 1857 and 1859, he decided that the only way to get at the source of his oil was to drill into the bedrock. It was a natural evolution of the industry. He had tried primitive drilling in Bothwell, and water wells were being drilled throughout the area.

In 1861, a special correspondent of the Toronto Globe visited the area and on September 16 of that year reported on well No. 27 drilled on Williams' holdings: "Well sunk 46 feet to rock; bore 100 feet in rock. This well averages the large quantity of 60 barrels a day. A very great deal of oil has been taken from it. It has been in operation two years."

The report makes no mention of previous wells, successful or unsuccessful, that Williams might have drilled, or the exact date of well No. 27. But it is in keeping with Williams' versatile and improving mind that he would drill before he had been in the business long. "Col." Edwin L. Drake completed a drilled well at Titusville, Pa., on August 27, 1859, the same year the Globe correspondent gives for Williams.

Williams' well, more than 30 feet deeper than Drake's, made him one of the first, if not the first, successful drillers of an oil well in North America.

In 1862 Hugh Nixon Shaw drilled and brought in Canada's first "gusher" at 165 feet. Propelled by underground gas, oil shot well above the trees and it was several days before the well could be brought under control. Thousands of barrels of oil were lost and the water of Lake St. Clair, into which Black Creek emptied, was black flat summer with a thick overlay of oil. In the vicinity of Shaw's and other flowing wells, over areas of 40 or 50 acres, oil stood on the ground from a foot to three feet deep. Oil men got around by leaping from log to log, using a pole to steady themselves.

This was not the only waste in those days. Early refiners produced only illuminating oil from the crude oil. Until the advent of the internal combustion engine, the lighter fractions of crude oil, now known as gasoline but then by various trade names such as naphtha or petroleum spirit, were for the most part either dumped into a creek or a hole in the ground or simply burned. Only the amber-colored lamp oil, or kerosene, was saved, resulting in a loss of up to 40 percent of the virgin oil.

At first kerosene was an expensive luxury at $1 a gallon (which then might have represented a few days' earnings), though it was cheaper than imported English coal oil, selling for $1.25, or an oil made from Albemarle, a bituminous mineral resembling asphalt found in Albert county, New Brunswick. By 1863, however, the Ontario product had dropped to 40 cents a gallon.

Other wells were completed and oil became almost a glut on the market. Several wells produced as much as 2,000 barrels a day. These yielded 6,000 and for a time the Black & Mattinson, biggest of them all, ran to 7,000 a day.

Williams first operated under the name of J. M. Williams & Co. But in 1860 he applied for incorporation of the Canadian Oil Co. The company was authorized to mine, manufacture and sell oil, with the principal place of business Hamilton and the site of operation Enniskillen township. By 1861, according to contemporaneous writers, Williams had raised at least 200,000 gallons of oil (another writer estimated 400,000 gallons). He now had five wells in operation yielding a total
of from 600 to 800 gallons a day. A total of about 400 wells had been drilled in the vicinity.

Faith in the Eniskillen wells ran high—too high, as it turned out.

At the height of the boom in Oil Springs, about 1866, there was a population of 3,000, 12 general stores and nine hotels. By that time there were more than 1,000 wells in production. The oil springs street was "pitch black as if it was the night of a mile and a half and was considered the finest in Canada.

Meanwhile, however, oil in greater quantity had been discovered about six miles away and a new settlement, dubbed Petrolia (later incorporated as the town of Petrolia) began to mushroom. A branch of the Great Western Railway was built from Wyoming to Petrolia, putting Oil Springs at a disadvantage. The town was stiff competition from kerosene produced in the Pennsylvania fields, and to top it off, in 1866 the first Fenian raid took place at Fort Erie. Many oil men decided they had better get back to their homes in the U.S. or other parts of Canada, in anticipation of war between England and the United States. Almost overnight, the population of Oil Springs dropped to 300. Oil output from the Springs dropped drastically, but over the years since then it has fluctuated until now there are about 400 active wells but their average yearly production is only about 45 barrels per well.

**OIL, MOST IMPORTANT MINERAL**

The Petrolia field, however, continued in good production, and by 1868 the Canada Year Book said, "Petroleum may be considered the most important mineral product of the Province of Ontario." Production of Oil Springs between 1860 and 1870 rose from 10,000 to 310,000 barrels a year. It reached a peak of 387,000 barrels in 1894, then dropped to a low of just over 100,000 barrels in 1900. It has been estimated that since 1914 the total Ontario production was 295,525 barrels, bringing all-time production of the Ontario fields to 31,621,182 barrels. And for this respectable total, a lot of credit is due to the stoic Welsh pioneer.

In 1860 Williams switched his refining operations from Oil Springs to Hamilton. He lived there in a comfortable mansion called "Mapleside" on the town's outskirts. He had a daughter, Melinda, who married another oil man, W. E. Beerdmore, and moved to Hamilton with her. Their sons, Charles Joseph, James Miller Jr., and Henry, Charles went into partnership with him in the Canadian Oil Co.

At the 1862 International Exhibition in London, England, the Canadian Oil Co. won a gold medal for being the first to produce crude oil and another for being the first to refine oils in Canada. The Hamilton city directory for 1862-63 noted that Williams' D. O. Williams had employed 16 men and refined about 120 barrels of oil per week.

Williams was a restless and venturesome businessman. By 1873 his Canadian Oil Co. had disappeared from the directory, and Williams was listed as president of the Canadian Carbon Oil Co.—sometimes recorded as Ontario Carbon Oil Co.—an analog of the Empire Oil Co. of France, who employed 16 men and refined about 120 barrels of oil per week.

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Williams had found time to serve for several sessions as alderman on the Hamilton City Council. His political record was so impressive that in 1867 upon the birth of Ontario as one of the four provinces united under Confederation, he was elected on a Liberal ticket as first provincial representative for Hamilton. He was re-elected in 1871 and retained the seat by acclamation in the election of 1875. In 1879 he retired from the Legislature and was immediately appointed registrar of Westport county as a reward for his services to the community. He remained registrar until his death at the age of 75 in 1880.

He was a director of the Mutual Life Assoc. of Canada, the Victoria Mutual Fire Insurance Co., the Provident & Loan Society of Hamilton, the Hamilton & Lake Erie Railway and the Hamilton & Northwestern Railway.

Records of Ontario's parliamentary proceedings during his years of office indicate that he was a man of few words. His speeches were rare and brief and restricted to the interests of his constituency. The Hamilton Times, in his obituary, said of his years in the provincial house, "His services as a shrewd, sound, practical and experienced businessman, acquainted with all the wants of the people, were of the utmost value both to the city and province. (He) was never absent from the post of duty.

The Toronto Mail, which might be expected to be less obliging because even in those days there was rivalry between the two cities, said, "As a businessman he was shrewd and successful and as a public citizen, zealous and enterprising. He was a genial and lovable man and will long be missed here."

Williams, for all his importance to the oil industry, is an enigmatic personality because he apparently left nothing of his own in the shape of autobiography or reminiscences. All that is known about him is from second or third-hand sources. Even photographs of him are hard to find. There is one, however, the Ontario Legislative Library in Toronto, a brown-tinted print in a thick-leaved book entitled, Portraits of the Members of the Legislative Assembly of Ontario, which appears again in 1898 when he appears as an aged man with moustache, side-whiskers and a clean-shaven chin, a heavy shock of greying hair and keen eyes edged with wrinkles that reflect both his years of outdoor life and sense of humor.

One writer described him as "a careful man, simple in his tastes, retiring of disposition, practical to a degree always dependable. He never driled a gusher or won or lost a spectacular fortune, but oil men said he was the man who left the first Oil Springs field.

He was a staunch Presbyterian, and it is in keeping with his independent nature that he was one of the members of Hamilton's Knox Church who withdrew in 1855 to form McNab Street Church, of which he later became a trustee.

Williams was not the first to dig for oil in North America. Father Gabriel Sagard, who died in 1650, included in his Histoire du Canada, a Franciscan who spent much of his time on the search for oil. In 1867 he joined the permanent staff and went to the paraffin department, now the deoxygenating plant. He is now an operator in the plant, a position he has held since 1847. His son Ivan is an engineer at the refinery.

Arthur Budyk, a 40-year veteran at Sarnia refinery, was born in Kamen, Russia, and came to Canada in 1913. In the same year he started to work at the refinery on a temporary basis. In 1917 he joined the permanent staff and went to the paraffin department, now the deoxygenating plant. He is now an operator in the plant, a position he has held since 1947. His son Ivan is an engineer at the refinery.

Rothias Scarlett, who recently retired from Ontario marketing division, joined the company as an invoice typist in 1914. The following year he enlisted in the Signal Corps and served overseas. Upon his return to civilian life in 1919, he rejoined Toronto office as a voucher clerk. He held this position until 1946 when he transferred to Sarnia refinery as foreman of its compound plant. He held this position until 1946 when he became unit supervisor of the grease plant.

L L. "Mac" MacKinnon, formerly western operations manager of the air transport and reservations department, has transferred to Toronto as assistant manager in charge of operations. Assistant manager Jack Martin will devote all his time to passenger reservations. Mr. MacKinnon, a native of Poonka, Alta., served with the RCAF for six years during the war. He was the DSO and DFC for outstanding service in North Africa, Italy and Pathfinder commands and was demobilized as a wing commander. After 16 months as a bush pilot in northern Quebec and Labrador, he joined Imperial in 1947 as a co-pilot. The following year he became a captain and in 1951 western operations manager at Calgary.

**New Appointment in Air Transport Group**

William Wightman and Harald Greenwood

Long Service Awards

William Wightman has retired after 40 years’ service with Imperial. He spent 32 years as chief Inspector of Regina refinery, Mr. Wightman was born in Scotland and came to Canada in 1911. Just before World War I he started in the timekeeping department at Sarnia refinery. When construction started on Halifax refinery three years later, he became head timekeeper there. He moved to Regina in 1922.

Harold Greenwood, also of Regina refinery, marked 40 years’ service and retired under the company’s annuity plan. He was boilermaker foreman for 35 years. Born in England, Mr. Greenwood started as a mechanic at Iloco refinery. Two years later he went to Regina as a boilermaker and over the next few years helped to build marketing tanks in the three prairie provinces.

Ivan Budyk, a 40-year veteran at Sarnia refinery, was born in Kamen, Russia, and came to Canada in 1913. In the same year he started to work at the refinery on a temporary basis. In 1917 he joined the permanent staff and went to the paraffin department, now the deoxygenating plant. He is now an operator in the plant, a position he has held since 1947. His son Ivan is an engineer at the refinery.

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The lift 50-year service award in the history of the company was made to Loren L. Miller of Sarnia refinery. Mr. Miller has since retired, and began work with the Gdaen Signal Co. in Pennsylvania. When that company opened a Canadian branch in 1920 he came to Toronto as assistant to the superintendent. He was later made works superintendent. Imperial bought the company in 1936, and Mr. Miller was transferred to Sarnia refinery as foreman of its compound plant. He held this position until 1946 when he became unit supervisor of the grease plant.
AIRWAVES ARE THEIR LIFELINE

by ROBERT COLLINS

Over a day-and-night radio network crackle operating instructions, reports, requests for supplies and messages from home for Imperial exploration crews in Canada's northland. If trouble strikes, help is always as close as their radio transmitter.

In the northern oil exploration camps the day's first check is the camp radio, part of a scattered network that keeps the oil hunt moving.

It was a bitter 35 below zero the night, two years ago, when John Rempel's car stalled on a deserted Alberta bush trail. The stocky young seismic supervisor from Imperial Oil's Peace River office was alone, 300 miles north of Peace River town and 51 miles from the nearest oil camp. Altogether it seemed a grim situation, but Rempel wasn't alarmed.

First he built a fire beside the road. Next he tinkered with the faulty gas line until his fingers turned numb. Then he checked the mileage reading on his instrument panel, looked at his watch and calmly waited by the fire.

Before leaving the previous camp he'd radioed his estimated time of arrival to the next crew. Now, he calculated, he'd be rescued in about 90 minutes. He was.

"Soon as you were half an hour overdue we started out," said the seismic crewmen who picked him up in a jeep. "Thought you would," said Rempel and, like a great many other Imperial oil men, mentally tipped his hat to the company's northern two-way radio hookup.

It was a typical example of how two-way radio helps Imperial's geologists, seismic crewmen and wildcat drillers maintain their unceasing search for oil for Canada in the wilds of Alberta, B.C. and the Northwest Territories. No one travels in this country without radioing ahead to his destination. It's one of the many ways in which radio, for nearly six years, has been Imperial's lifeline in the toughest oil hunt on the continent. It is probably the busiest little network in the north.

Every day of the year the airwaves crackle with drilling or geological reports, orders for groceries or machinery, important family messages for crewmen, urgent calls for medicine or an airlift to hospital. As one seismic party chief puts it, "Radio's made a serious situation not very serious at all."

From the beginning Imperial realized that radio communications is a "must" in the north. This potential oil country is a land of bush, muskeg and enormous distances. The seismic and drilling camps sprawl 70 to 350 miles from Peace River. As exploration continues the distances increase. There are no telegraph or telephone lines, of course. There are crude built-up trails which, when frozen, will support trucks. But the trails are unbelievably rough and speeds rarely exceed 20 or 30 miles an hour. Two Imperial bush planes fly constantly among the camps but storms often ground them. So it's radio that keeps the oil hunt on the move.

The network comprises 24 Spibury-Hepburn transmitter-receiver sets, ranging from 10 to 200 watts. The main control station, in a Peace River warehouse office, is managed by Imperial's Herb Sinclair (who's also in charge of transportation) and three operators on a 24-hour shift. A sub-control station,

In miles, a remote camp—by airwaves, seconds from outside aid.
200 miles up the Mackenzie highway at the Steen river base camp, runs on a 16-hour shift. Between them, these 200-watt units keep in touch with the smaller sets. If a bush camp can’t receive Peace, it can generally relay the message via Steen. The network operates on two frequencies; if one is fuzzy with static they try the other.

The 50 and 10-watt sets are distributed among the mobile camps. As soon as a seismic or drill crew pitches camp with its caravan of aluminum trailers, the party chief erects an aerial and warms up the radio set in a corner of his office-trailer. Radio’s as vital to him as a hot breakfast.

Back at Peace River the control station is an exciting jumble of sound, something like a taxi dispatcher’s office: faraway voices, strange messages, mysterious call letters and code words. Peace River has good news for a crew member in one of the seismic camps: he’s a new father; mother and baby doing fine. A drill camp “toothpush” (chief driller) calls in for a spare part and adds plaintively, “And please, could you send a tin of tobacco, too?”

There’s a brief silence — then a new voice crackles over the receiver: “CKOS to CJW57, CKOS to CJW57, do you read? Over.”

The Peace River operator picks up his microphone: “CJW57 to CKOS8, Roger, Roger, John, reading you loud and clear. Over.”

It’s a toothpush setting up a wildcat well just below the Northwest Territories border. He needs a truckload of lumber but the static’s giving him trouble. Finally he gets his message through: “... that’s DRESSED two-by-fours, yeah, DRESSED... you know, like a chicken... get it, Bob? Roger, Roger... this is CKOS8, over and out.”

Then from a wildcat rig inside the Territories comes the clear voice of geologist Oscar Friesen: “... BEAR... TEEPEE... IGLOO... OX... BEAR... DOG...” Friesen is actually describing the underground geological formations that the rig in his camp is currently boring through. Like all geological, drilling and seismographic survey reports, his message is in code. That’s to keep vital information away from rival companies, who are also exploring the north and also use radio.

There are a few other regulations, written and unwritten. During the busy winter season, for example, crews don’t radio long grocery lists to Peace River. For one thing, it consumes valuable air time. For another, a burst of static may garble your message and you’ll end up with eggs and baking powder instead of eggs and bacon.

Apart from aircraft broadcasts, which have top priority at all times, it is bad form to “cut in” on another message except in extreme emergencies. Crows are also asked to leave a one-minute lapse on the air between messages so that urgent bulletins can get through if necessary. And, although it’s a great temptation to call up your neighboring camp on this “party line”, messages are supposed to be brief, clear and confined to business.

Often the static is bad, and radio becomes a frustration rather than a friend. One night last winter toothpush Mack Brown was sending a drilling report from the Territories to Peace River. With just three words left in his message, the radio faded out. For 20 minutes he tried to get through, then gave up. Five minutes later the atmosphere cleared and Peace River came through loud and strong. Brown shrugged philosophically. There’s not much he can do.

Another time one of Brown’s drillers fell into the “cellar” beneath the derrick. Luckily he was only bruised, for the radio chose that night to black out completely.

But more often the network saves lives. A crewman at a seismic camp develops a serious infection in the hand. The camp is several days away from Peace by road, the nearest airstrip is 15 horse-shaking miles away so the party chief asks Peace River for sulfa pills. The next morning Beaver pilot Lloyd Stewart swoops over and drops the medicine. A day later the infection is clearing up.

At a wildcat well in the Territories a man has appendicitis. A radio message — a plane trip — and he’s in hospital. Another camp calls in — it has a pneumonia patient to go out. Still another thinks it has a polio case.

“Don’t worry,” says Peace River. “We’ll pick him up in the morning if necessary.”

As it happens it isn’t polio and the man recovers at camp. Probably the mere reassurance that he’s in constant touch with Peace River and only two hours from hospital helps cure him.

So it goes, day after day. Radio copes with routine and emergency and keeps the oil hunt alive. Probably its strangest service was performed one Sunday morning two years ago. A small geological party without a full-fledged cook radioed Herb Sinclair, somewhat sheepishly.

“Can you tell us how to cook a chicken?”

“COOK, A CHICKEN!”

“That’s right, Herb, nobody here’s ever tried it before.”

Sinclair looked blankly at the others in the radio shack. Finally someone said, “I’ll phone my wife.” The wife provided instructions and Sinclair relayed them into the bush. Again, Imperial’s network solved a serious situation. At least, Sinclair hopes it was solved. He never did hear how the luckless chicken turned out.
Two weeks each year dog food is at a premium in Frobisher, Saskatchewan,
with 200 hungry hunting dogs in town seeking international honors

Frobisher, Sask., literally goes to the dogs in September.
Less than 20 miles from the U.S. border and about 40
from the Manitoba boundary, Frobisher normally has a population
of about 200 people and 50 dogs. During September the census jumps to 300 people and some 250 dogs.
The sudden—and vocal—increase in canine population heralds
the beginning of one of the continent's top hunting dog trials—
the Border International Field Trials—which start on Labor Day
and continue for about two weeks.
The dogs—mostly from Georgia and Alabama—include some of
the finest pointers and English setters anywhere.
The trials are big business, not only in Frobisher but in interna
tional dogdom; first prize money can run to $1,800 or better.
They are held around Frobisher because its flat, gently rolling
countyside is ideal for hunting prairie chicken. There is little
brush and not too many fences.
The Sunday before Labor Day a weird assortment of trucks,
some big, some small, but all fitted with dog cages, starts to arrive
in Frobisher. By five o'clock that night the town is in an uproar.
The 50 town dogs come out to howl, yip and bark a welcome to
the 200 caged visitors, who yap right back. Trainers, handlers and
scouts, some of them with their families, crowd the small hotel
lobby and overflow on to the board walk of the main street.
"Bud" Hassard, his 14-room hotel bustling at the seams, marshals
the townpeople to take care of the overflow. The hotel lobby and
the dining room are headquarters for the dog men. It's dog talk
for breakfast, dog talk for dinner; dog talk all the time—all in
southern accents and drawls. A Canadian in the crowd sounds like
a foreigner.
The trials are important to dog owners because they prove the
worth of the dog and the trainer. Let's say you are one of the 50-
odd Americans who has a training camp in southern Manitoba or
Saskatchewan where you bring your dogs every July, August and
September because it's too doggone hot to train dogs down south.
You have a very expensive dog—perhaps worth as much as
$3,500—with a fancy name like Satilla Wahoo Pete. You've
trained him since he was a pup and he's ready for the allage
stakes. You enter him and the owner pays the shot, $30. If it were
a championship the entry fee would be $50.
The Sunday night before Labor Day you crowd into Frobi
sher's Canadian Legion Hall with all the other trainers for the
draw. All the dogs' names are put into a hat, and are then drawn
in pairs. The dogs run in pairs or braces. Pete's name is in the hat.
"You sure there just a prayin' that he will be paired off with a good
dog and that Pete will get one of the good courses. You were at
the Border International last year and know which courses have
lots of birds and which haven't.
You're lucky. Pete's name is drawn along with that of another
good dog. The course is one of the best. Now all you have to
worry about is weather, deer, rabbits, porcupines, and hope that
Pete feels like working and not "just rastlin' his bones."
The 15 or more trial courses, each three-quarters of a mile wide
and two miles long, are arranged by the Canadian Legion which
sponsors the Border International. The Legion also supplies the
marshals to guide the party and the dog wagon to follow the
"gallery" with the dogs for the succeeding runs. It hires saddle
horses for spectators and books after the judges' expenses.
To a professional dog trial makes sense; to the uninitiated it's
confusing. It looks to be about 40 percent trucks, 40 percent horses
and 2 percent dogs. Trucks carry the horses and dogs to the
courses, they follow the runs by driving along the side roads;
they're never out of sight. Everyone following the dogs is on
horseback. So there are lots of trucks and horses. But the only
dogs in evidence are the two running in the brace. The rest are
coupled up in cages on the dog wagon or the trucks.
The trials start at 7 a.m. To see the first brace run you have to
rise with the sun, the trainers, scouts and judges at 5:30. Breakfast
is on the run. The first course is six miles south of town and the
small caveland is there by 6:30. Horses are saddled and the dogs
are raced.

At 7:00 the first two dogs are let loose. Behind them, riding like
rodeo cowboys, are the two trainers and their scouts. Each
trainer controls his dog by yelling and blowing a whistle. When
he isn't doing that he's bellowing a chant that sounds as though
it originated in darkest Africa. This is so the dog "will know what
he's in."

Following behind at a more leisurely pace comes the gallery, all
mounted: the marshal, the two judges, other trainers and scouts
who will follow on the next two or three courses, and any souls
who are brave enough or interested enough to follow the run.
The dog wagon, sometimes pulled by a tractor, brings up the rear.
The dogs range back and forth at the commands of the trainer looking for prairie chicken. When one scents a bird or a covey he comes to a point. Then there's action! The trainer, the scout and anyone else who is handy, raises his cap in the air and yells, "Point! Point!" The judges and the gallery gallop up. The judges look the dog over, make notes and then nod to the trainer to flush the birds to prove that one of these smart dogs isn't trying to pull a fast one. Then off the dog goes again, looking for more birds.

The dogs are judged for knowing what to do; for their bird work, finding and pointing birds; on class, for the way they carry themselves, speed and stance in pointing; and for handling, the way they will range but still obey the trainers' commands. The dog has 30 minutes to show his stuff in a stake and an hour in a championship event.

By the time the fourth or fifth brace is on the run it's 9 a.m. and the less hardy have arrived. The horse gallery has grown to quite a size and the truck gallery is in full array. There is no standard design for the trucks; they are of all shapes, sizes, makes and vintages. Some have the trainers' and scouts' horses up front and the dog cages behind. Others have the horses at the back and the cages up front. And there's still room for the dog food and hay.

Some are just pick-ups with portable kennels in back. Trainers, their dogs and horses, range the continent in these odd-looking vehicles, covering dog trial after dog trial from Froshisher to Texas, to Georgia to New York from September to April.

There's one thing missing at the dog trials—the dog owners. A few come, maybe half a dozen out of 160. They are the incongruity in the business. They own the dog, paying sometimes as high as $5,000 for him. They pay the training fee of $50 a month, plus an extra $50 for the three months in Canada. They pay the entry fees for the stake trials and championships. In return they get no cash whatever. All prize money goes to the trainers.

If he's lucky the owner might be allowed to shoot over the dog, if he comes to the trainer's camp and lets the trainer supervise the shooting. The best he can hope for is his name in the blue book of dogdom, The American Field, or perhaps a trophy to keep for a year and the prestige of owning a champion. They must consider that's reward enough, for the next year the dogs will be back and Froshisher will once again echo to dog barks which 'sho' nuf sound like "bow-wow you-all."