



## Chapter 1

### Minnesota to Gillam, Manitoba

*You only live once, but if you work it right, once is enough.*

—BOXING CHAMPION JOE LEWIS

**I**t's the second week of July. Sirius, the Dog Star has returned to its lover to rise and set with the sun. The Ojibwa month of the Strawberry Moon has slipped away, replaced by the Molting Moon, the Cree Moon of the Falling Feathers.

The spring peepers that romanced the nights away in a nearby bog have gone silent, their trilling replaced by an inquisitive owl that queries the night like a forlorn detective, asking over and over—who, who, who? On the forest floor, dainty pink hepatica, as if exhausted from their spring fling, have gone green. In their place, bunchberries

bloom; sweet and juicy, red-lobed dewberries beckon, and ripening blueberries are turning cobalt blue.

Global warming, which thaws northern lakes a full week earlier than in the sixties, has delivered an early start. That's convenient for me, but it's trouble for polar bears that patrol the shrinking pack ice in their winter-long search for seals. Those who profit from global warming are still in denial, but summer adventure seekers with shallow draft boats are finally free to explore northern Canada's formerly ice-bound shores.

While the sun attacks the morning fog and I stow my gear in the Cub, I think back to the winter of 1966, the year that Sam Brown, the flight instructor at Brown's Seaplane Base plunked me into the left seat of a Cessna seaplane and said, "Let's go." An hour or two later, having neither wrecked nor sunk the Cessna, I had added a new rating to my pilot's license: "Single engine land and sea."

The following spring, I sold my beautiful, fast, quiet and comfortable Beechcraft Bonanza and bought a nicely restored twenty-year-old, slow and noisy Piper Family Cruiser, installed a new set of floats, then waited until late July to let the northern lakes shed their shackles of ice. Despite the wait, my father and I arrived a little too early, but we managed by using shoreline strips of open water.

I've wedged my life preserver into the overhead fuselage bracing. It's a practical place for it—out of the way and quickly accessible—but it's never quite secure. Constantly seeking freedom, it will slowly sag in response to engine vibrations until it gently touches my head, saying, "It's me again." Although I'll rearrange it time and again, it will always return. Faithful to its name, my preserver weighs against solitude, reminding me periodically that I am not alone.

I give my wife a hug and promise to be careful. I'm eager to leave, prodded perhaps by Kipling's "We must go,

go, go away from here. On the other side of the mountain we're overdue..." I set the magnetos to "both" (aircraft engines have two independent ignition systems), step to the front of the float and give the prop a spin. On the third spin, the ninety-horsepower Continental barks to life.

As the engine warms, I scan my chart, smiling at the string of familiar landmarks that will lead me north. The oil temperature needle rises from its peg as I turn full circle to check for landing aircraft, then swing into the wind and pour on the power. My newly overhauled engine quickly pulls the Cub onto the step and within seconds we're airborne, heading north in a steady climb. Virginia falls behind and then the Laurentian Divide. A few minutes later, my right wingtip points toward a played-out underground iron mine at Soudan, where a new research project is studying the tiny, elusive particles that scientists call "neutrinos."

Two thousand feet below the surface, a 6,000-ton detector (a catcher's mitt, if you will) is fielding neutrinos pitched through 450 miles of the earth's rocky mantle by a particle accelerator at Chicago's Fermilab. There, the accelerator's mighty arm hurls protons at a carbon target to create neutrinos, some of which race toward Soudan at the speed of light. Undeterred by solid rock, the smaller-than-atom neutrinos zip beneath Lake Superior so quickly that they reach Soudan just 2.5 milliseconds after their birth. There, they are analyzed to see if the little chameleons have changed from one type to another while en route. That answer, along with other experiments, might help solve two problems: Where is the missing mass of the universe that physicists believe exists, and, will a better understanding of particle physics lead to a new, cheap and almost unlimited source of energy?

Years ago, when novelist John Updike turned his mind to neutrinos, he summed them up this way:

Neutrinos, they are very small,  
They have no charge they have no mass  
And do not interact at all.  
The Earth is just a silly ball.  
To them, through which they simply pass,  
Like dustmaids down a drafty hall  
Or photos through a sheet of glass.  
They snub the most exquisite gas,  
Ignore the most substantial wall,  
Cold shoulder steel and sounding brass,  
Insult the stallion in his stall,  
And, scorning barriers of class,  
Infiltrate you and me! Like tall  
And painless guillotines they fall  
Down through our heads into the grass.  
At night they enter at Nepal  
And pierce the lover and his lass  
From Underneath the Bed – you call  
It wonderful; I call it crass.



They'll be giving tours of the mine today. It's 80 degrees on the surface, but outside the heated lab it's chilly down there, thanks to our latest glacier. To overcome the lingering cold, we'd need to burrow straight down another two thousand feet. But to really warm up, we'd have to go deeper still. In South Africa's Western Deeps gold mine, which is two miles deep, cool air must be pumped down the shafts to counter temperatures of 140 degrees. Not hot enough? Dig down another three miles and you'll hit 500 degrees.

I'd be jealous of the speedy neutrinos if the headwind was strong, but it's gentle today, and I soon pass the western border of Minnesota's Boundary Waters Canoe Area, an

immense region of pristine lakes and forest reserved for canoeists, kayakers, backpackers, skiers and dogsledders, but not for motorcycles, ATVs, power boats or seaplanes. The only oxygen-burning, carbon compound-consuming engines allowed are living creatures like you and me.

Canada, the great sprawling bounty that the British won in the French and Indian Wars, fills my view from wingtip to wingtip. The Brits should have been thrilled, but with the war won and the prize in hand, their resolve began to diminish. Some even suggested trading Canada back to the French for a tiny Caribbean island that we now call Guadalupe.

As the Cub descends toward the seasonal Canadian Customs office, I think back through forty years of border crossings here at Sand Point Lake. Here a misinformed Customs Agent made me return my rifle to a friend at nearby Crane Lake because he was certain it was illegal to bring it into Canada. (He was wrong, but what could I do?)

Here, I labored through the difficult job of hand-propping my Lake amphibian back to life when its starter failed, only to have to dive for the cockpit to shut it down when a bystander headed straight for the whirling prop.

On these docks, I watched a pilot load the bodies of two teenagers into an airplane for their final flight home. Neither could swim, and neither wore a life preserver but, filled with the exuberance of youth, they decided to canoe-surf huge waves raised by a powerful storm that would flatten thousands of trees. They capsized. Foam-filled chambers kept the canoe afloat, and they clung to it, hoping to drift to shore, but it was early spring and the water was close to freezing. They began to shiver. Within minutes, they lost control of their muscles and drowned.

Contrary to cynics who call Canada “a region just north of summer,” it’s a beautiful 80-degree day, and I’m close to sweating as I begin to secure the Cub. Distracted by a

weary-looking de Havilland Beaver rumbling away from the pier and a friendly golden retriever that wants to help with the knots, I don't notice the customs agent arrive, so when I stand up to greet him, I'm surprised to see that he's a she, and an attractive one at that. It's her first summer here, and she loves it.

"Not much night life, though," she says with a wistful tilt of her head. "Crane Lake (a tiny, U.S. settlement just three miles away) is all there is, but it's a fair exchange. I've already applied to come back next year."

The retriever is hers. One of my sons has a goldie, too, so after a few minutes of dog-lover tales, we get down to business. The questions are still the same:

"Where will you be going?"

"Nunavut and the Northwest Territories."

"And how long will you stay?"

"About two weeks."

"Are you carrying any alcohol?"

"No."

"Tobacco?"

"No."

"Firearms?"

"No." (I've always brought a rifle, but because a permit is now required and I've never needed one, I've left it behind—no red tape and five pounds less to carry.)

She asks me to open a float compartment, which surprises me because that's never happened before. I ask, "Which one?"

She points.

I open the compartment, which holds nothing but air and a few drops of water.

"Another?" I ask.

"No," she says, returning my passport. "That's it. Nice talking with you. Enjoy your stay in Canada."

As the Cub idles away from the pier, the bows of my

floats cut through the dark water, creating curling wakes that bring childhood memories of crossing Lake Vermilion in the fourteen-foot dory that my grandfather built from strips of hand-planed ash. While our two-horsepower Evinrude roared away, I'd trail a twig in the water at different angles and depths, captivated by the changes in drag and the tiny wake it produced.

A few years later, a three-horsepower ELTO twin replaced the single, and as it propelled us to and from our island cabin I wondered what ELTO meant, later to learn that it stood for Evinrude Light Twin Outboard, the new model that a Norwegian immigrant named Ole Evinrude developed in 1928, years after inventing the first outboard motor, which eased his way across Wisconsin's Lake Okauchee to get ice cream for his girlfriend Bess, whom he later married. Now, more than sixty years later, moving water still calls to me, whether ocean, lake or stream. Dissolved in rambling thought, I can watch its ripples and waves for hours, but flat water, perhaps because of its deathlike pallor, always leaves me cold.



The Tundra Cub II parallels the international boundary for twenty miles, and then leaves the border behind at Rainy Lake, the site of the last of Minnesota's marginal gold discoveries. There, in 1894, the town of Rainy Lake City leaped into being when George Davis found a vein of gold-bearing quartz that became the Bushy Head mine. Three hotels, a boarding house, stores, tents and seventeen saloons appeared almost overnight. One roofless saloon even stayed open during the first month of winter until their roofing arrived. The boom soon collapsed. None of the buildings survive, but the entrance to the Bushy Head

mine still stands open, as if waiting for one more optimist to make a run for the gold.

A few miles to the west, the Rainy River begins a downstream run to the border town of Baudette and a walleye factory called Lac du Bois—the Voyageurs' Lake of the Woods. Although it's midsummer, the river still brims from heavy rains, creating a broad, blue, eighty-mile runway all the way to Baudette.

I'm not the first to admire the Rainy, the voyageurs' "Riviere de la Reine"—the Queen River. Alexander Mackenzie, the Northwest Company's premier administrator/explorer, loved the Rainy, calling it, "one of the finest rivers in the northwest...Its banks are covered with a rich soil...with the open groves of oak with the maple, the pine and the cedar."

The Rainy flows across the Canadian Shield, the immense, rocky lens of ancient stone that covers much of Canada and parts of the northern U.S. Here, in the thin layer of topsoil that took thousands of years to form, the boreal forest thrives, each species within its own niche. Black spruce loves the acidic bogs. A few steps back from the bog, the slightly dryer ground nurtures a progression of alder, tamarack, cedars and balsam. As the terrain rises, tall stands of red maple, aspen and birch take over, only to be replaced by dominant white, red and jack pines. It's undeniably beautiful, but for me, it's like eating steak every day. Give me two weeks out on the tundra, or in the Yukon's Ogilvie Mountains, and the boreal forest will shine again.

Those who live where glaciers have never intruded might find it hard to believe that this lake-strewn, river-webbed land was created by masses of ice that have overwhelmed almost a third of the globe. Author Janine Benyus explained it this way, "The northland is one of the most recently uncovered places in the world. Less than 10,000 years ago, when civilization was well under way in

the Middle East, parts of the north woods were still under an icecap that stood two miles high... The enormous weight of the ice caused the lower layer to bulge outward, bulldozing mountains and gouging the earth as it moved.”

We now know that the last ice age lowered ocean levels some 3,000 feet, uniting Alaska with Siberia, England with France, and almost closed off the Strait of Gibraltar. And though the glaciers extended well into Minnesota and Wisconsin, paradoxically, much of Alaska and Siberia remained ice-free.

Centuries later, when the glaciers began to thaw, great rivers flowed across the land, leaving behind the heaps of rock, gravel, sand and clay that form the lake-strewn landscape that draws thousands of tourists today.

Red Lake, the Ontario community that derives its name from the lake's russet waters, lies 180 miles to the north. We attribute the lake's hue to an assortment of minerals, but an Ojibwa legend claims that during the ancient times, two hunters spotted a large moose standing in the shallows of a beautiful lake. Believing that the animal contained a Matchee Manitou, an evil spirit, they tried to kill it, but the wounded moose escaped by diving into the lake. When its blood tinted the water red, the hunters named the lake Misque Sakigon or “Color of Blood Lake,” and that's how Red Lake received its pre-white-man name.

I've flown this route so often that I can recite the waypoints and recall their contours and sights: linear Red Gut Bay with its pendant-shaped log booms, then island-studded Manitou Lake, where one spring I fished all day for lake trout, but caught just one while my companions boated their limits. (When I grumbled about my lack of success, my friends reminded me of the fellow who also caught a single fish during his stay at an expensive resort. When he complained, “That's \$2,000 per fish,” his guide replied, “Be glad that you didn't catch two!”)

A logging road leads north to Eagle Lake and the trans-Canada Highway, followed by the seaplane base at Vermilion Bay where I once sought shelter while a nest of roiling thunderstorms stalled overhead for hours. Beyond Vermilion Bay lies Wabigoon Lake, which is packed with muskellunge. Packwash Lake ends at Snake Falls, where the Chukuni River begins its run to Red Lake, the town where an eighty-year search for wealth continues in the gold-rich 2.7 billion-year-old greenstones of world-class mines like Placer Dome and Goldcorp, Canada's largest gold producer.

How large, you ask? Goldcorp alone is expected to yield 740,000 troy ounces of gold per year from shafts that will extend 7,000 feet below the surface, and as I pay my fuel bill—gas is expensive up here—I'm reminded that for every miner who works below, hundreds more make a living by mining the wallets of tourists like me.

Knowing that water could do most of the mining, prospectors first searched the grit and gravel of streams for "color" by swirling the water-earth mix in a pan or rushing it through a sluice box to carry off the waste and concentrate the gold. Thus, the first gold seekers were "placer" miners who panned for gold in streams and rivers. Why "placer"? Because the Spanish word carries the meaning of "pleasure," and panning for gold is undeniably more pleasant than blasting out a living in a dark and dangerous underground mine.

The tables at the Waterfront Restaurant are full, so I take a stool at the counter beside a lean fellow with a scruffy, gray beard and enormously dirty glasses. Leonard is a sixty-something mining engineer who, as it turns out, loves to talk.

"So," I ask, "how many gold mines are there?" while wondering if there's a polite way to ask why he doesn't clean his glasses, which really bother me. How, I wonder, can he see through those things?

“Well,” says Leonard, “there are three major mines plus a bunch of smaller producers, but they’re not just here at Red Lake. They’re in the Red Lake area—at places like Balmertown, Cochenour, McKenzie Island, Madsen and Starratt Olsen. Production began in the twenties but there’s still a heap of gold. Last I heard, reserves around here stood at something like 23 million ounces. At \$600 Canadian per ounce, that’s—let’s see— almost 14 billion dollars!”

When our conversation drifts farther north, I mention Jack London, the budding author who left the Yukon without finding more than pocket change gold, and ask if here, as in the Yukon, most of the gold seekers left empty handed or fell back on conventional work.

“I suppose so,” he says, “but I wasn’t here until the sixties, so I really don’t know, but if you haven’t already heard it, I’ll tell you a story about one fellow who finally struck it rich despite all sorts of setbacks.”

“Love to hear it,” I say.

Leonard slowly removes his bespeckled spectacles, folds in the temples and dips them into his drinking water. He then polishes them with his napkin, which produces a huge improvement, leaving behind only a few spots that look like welding torch splatter.

“His name was Marius Madsen, and if that sounds familiar, that Madsen Mine and the town of Madsen take his name. If anyone ever lived an interesting life,” he says, with a lift of his eyebrows, “it was this guy.

“In 1920, when he’d just turned nineteen, this kid became the youngest member of an expedition into the Arctic for some Danish company. When they were hundreds of miles north of the Circle, their ship got crushed by pack ice and began to sink, so the crew hauled whatever they could to a hut on a nearby island. They didn’t have a radio—no way to tell the world of their troubles—so they figured that a year would pass before anyone tried to find them.

“They lived on whatever they could shoot and some twenty-year-old canned goods they found in the shacks, feeding it first to their cat, which they used as their ‘taster.’

“When rescue finally came, Marius decided to remain in Greenland at one of the company’s posts. Two years later, Marius and two companions found themselves drifting away from shore on pack ice that had suddenly broken free. They had two choices: either stay on the ice and hope to be found before it fell apart or attempt to swim the widening gap between the ice and the mainland. They decided to swim.

“After barely making it through 200 feet of freezing water, they were still four miles from their camp. Their clothing froze, and frozen clothing gets stiff as a board, eh? By the time they reached the shack, all three were too weak to move. The way Marius tells it, two days passed before he managed to crawl out of his sleeping bag to start a fire.

“When they bathed their frostbitten feet, their toenails fell off in the water, which they emptied outside. Then they discovered that they couldn’t tolerate their wool socks rubbing their raw toes, so they went looking for their toenails, which had frozen in lumps of ice, so they thawed them out, and after deciding which nails fit whom, held them in place with bandages.

“By the time Marius arrived in Canada, his toenails had grown back, so he set out for the interior, making the final 100-mile trip north from the railroad to Red Lake by dogsled in 1926, and right away staked a claim.

“That claim turned out to be one of the best. The gold it produced let Marius retire in Jamaica. And you know, whenever I think of that guy, I wonder about the twists and turns in our lives. For some, they bring despair, but for others, riches. For this guy, every decision he made moved him closer to his big payoff. He survived an arctic shipwreck and then a deadly swim. He arrived at Red Lake

at just the right time. He drove his stakes in just the right place, and now he's remembered by a mine and a town that bears his name. Lots of others died or went bust. Makes you wonder, eh?"

The waitress arrives, leans on the counter and writes up our bills.

"Leonard," I say, "that's a great story. Could I have your phone number, so I can call you when I get home?"

"Oh, hell," he says, "I can't remember it—don't call myself, you know. Just write your address on a piece of paper and I'll send it to you."

When Leonard rises to pay his bill, I notice that he cannot straighten one knee.

As he limps out the door, the waitress asks, "Have nice chat with Lennie?"

"Yes," I reply, "I did."

"I heard him tell you about Madsen," she says, "and that story's true, but don't count on getting that phone number. Lennie doesn't have a phone, and he's not a mining engineer. He prospected for years and then went broke, so he worked in the mines, and that's where he got banged up. What he does have, however, is a lot of friends, and that's worth something, too."



Red Lake is famous for gold, but it's also the Norseman Capital of the World, the Norseman being not a Scandinavian, but a huge aerial workhorse that can be switched from wheels to skis to floats as the seasons change. They're the oldest aircraft in regular commercial use in Canada, but most of the remaining forty-three Noorduyn Norsemen are out of license. In fact, the greatest concentration of airworthy Norsemen is in Red Lake, where

five still serve the needs of the North. Every year at Red Lake, the remaining Norseman aircraft come together late in July for Norseman days. The town is abuzz with seaplanes. There's a fly-by and a parade with children riding in modified gas drums with stubby wings and tails. There are also rumors of beer!

At a nearby park, where a float-equipped Norseman has been mounted atop a graceful pylon, I begin to appreciate its size. The fuel capacity, at 245 gallons, is huge for an older single-engine airplane. Add a twenty-three-gallon oil tank and it becomes apparent that the Norseman was meant to stay aloft for hours. That said, she's a load-lifter, not a racehorse, which explains why critics call the Norseman an "eighty-five" airplane—takes off at 85 knots, flies at 85 and lands at 85. Truth is, with a 600-horsepower Pratt & Whitney engine, she'll do better than 100 knots (115 mph) on floats.

I sit in the shade of the Norseman, thinking of the early days of the fur trade. In the 1700s, six weeks of hard paddling separated Hudson Bay from Great Slave Lake, a distance that the Tundra Cub can span in one long day. I marvel at how far aviation has come since the Gold Rush days of 1926 when Jack Elliott and Harold Farrington, each with a single passenger, made the first commercial flights to Red Lake, where they landed in three feet of snow. When taking off in deep snow proved impossible, they hired Natives to pack down a half-mile-long runway. The delay forced an after-dark landing back at the railroad, but they landed safely, thanks to a runway hastily outlined with dozens of flaming, fuel-soaked rags.

In the twenties, a few enterprising Canadians began flying "liquid gold" from Canada to Minnesota during the Prohibition-created drought. One pilot filled his floats with bottles to hide them from the feds and headed off to the states, but the lake where he landed was so rough that all of his bottles shattered, leaving a crowd of thirsty men staring

down into the floats. However, a hose was found, and the celebrants were soon having a great time sitting on the edge of the dock, sharing the hose until good sense finally made them quit, or they tumbled into the lake.

By the thirties, bush planes were dominating travel to the gold fields, just as they would eventually replace the “cat trains” that hauled huge cargo sleds through forests and across frozen lakes with bulldozers, the “Iron Huskies” of the North. By 1936, aircraft were landing at fifteen-minute intervals at Red Lake, Gold Pines and Hudson, making them the busiest airports in the world.



Green Airways is busy today, so to give them some space at their crowded docks I fill just the emptiest tank, check the oil and fire up the Cub. The wind has dropped, and with one tank full and the other down just a little, I should have plenty of fuel for the four-hour flight to Ilford.

As I taxi out, I flip on my portable radio, wait for a break in the transmissions and give Red Lake a call.

“Red Lake radio, Piper 4855 Mike is ready for takeoff at Howie Bay. Please activate my flight plan.”

“Piper 4855 Mike, your flight plan is activated. Wind is north at 4 knots. Pressure is 29.94. Call when clear of the zone. Good day.”

I love my new ANR (active noise reduction) headset! Unlike conventional sets that only insulate one’s ears, my ANR headset also reduces background clutter by generating sound waves that cancel out much of the unwanted noise. Powered by two AA batteries, it’s so comfortable and effective that during long flights I sometimes become like the princess who was troubled by a pea beneath her mattress. Annoyed by the remaining sound, I begin to think

I've forgotten to turn the headset on or that the batteries have died, but when I turn it off to see if it's working, I'm astounded by the crush of sound. With my new headset, I no longer need to strain to understand the tower or ask for repeats. Now it's just like using a phone.

Thirty minutes later, Pikangikum slips behind. "Pik," like Sandy Lake and Cat Lake, is one of many settlements that are home to the Swampy Cree and the northern Ojibwa whose ancestors labored to supply furs to the Northwest Company and the Hudson's Bay Company. In that rivalry, the HBC had an advantage over the French because the French traded expensive brandy for furs, but the economy-minded Bay used cheaper gin, which, when tinted with iodine, looked like brandy and produced the same results.

Some Ojibwa believed that a beaver dove to the bottom of an all encompassing sea to bring up the first bit of land from which the continents were formed, but these Ojibwa call themselves the *Anishinabek*, the "Spontaneously Created People"—a satisfyingly primal name. I admire its simple theology: No miracles. No passion to proselytize. No excuse to mount a Crusade or declare a Jihad. No threats of hell for those who fail to toe the theological line, and no fancy creation story needed. They're simply here!

It's 300 miles to Ilford, so to entertain myself I dig out my new GPS and try to learn a few tricks. With the stick between my knees and my feet on the pedals plus an occasional glance ahead, I begin to read the manual, which was apparently written for people who have already owned a GPS, but not for greenhorns who dislike buttons with multiple uses that vary from time to time. As the Cub drones on and my frustration increases, the last of the roads fall behind, replaced by jack pine forests, rivers and lakes. When I finally give up, the brown waters of Varveclay Lake lie well off to the right, thanks to my drifting off course while trying to learn a new way to navigate.

The Cub briefly parallels a long, meandering stream. On its flanks, hundreds of round, cream-white dots of various sizes peer up at me. I wonder what they are, but when a pond and a beaver dam appear, I realize that the dots are the tops of aspen stumps left behind by beavers that compulsively dam streams to create ponds in which they build their mud and stick homes, their winter refuges.

It was long thought that the sight of running water stimulated beavers, but Bill Calvin in *The River That Flows Uphill* argued that it's the sound that drives them. According to Calvin, one researcher "put a loudspeaker on a riverbank and played a tape of a bubbling brook. The beavers plastered the speaker, not the river, with mud and sticks." When the tape was turned off, the beavers stopped, apparently satisfied with their efforts.

Island Lake, a huge lake so strewn with inlets and islands that it would take a lifetime to learn its secrets, slowly passes below. When the ice is at least thirty inches thick, forty-ton semis ride its frozen face, hauling freight from lake to lake across the frozen muskeg. If they're empty, the trucks boot right along, but when they're fully loaded, drivers slow to ten miles per hour. Drive a loaded semi too fast, and the sagging ice creates a subsurface wave in front of the rig, breaking the ice from below as the wave approaches the shore.

I've entered Manitoba, the Cree's "land where the spirit lives," but despite being aloft for two and a half hours, I'm only halfway to Ilford. That's just 72 mph! A glance at the lakes reveals the reason: The wind is up. Way up, in fact, as the white caps plainly reveal. To reassure myself that I have plenty of gas, I glance at the gauges and get an even bigger surprise. The left tank is two-thirds empty, and so is the right! At first I think I'd forgotten to put the gas cap on, and the fuel's been sucked out of that tank, but that can't be the reason, because I've done that before, and I've been VERY careful since.

After a minute of head scratching, I realize what has happened. In my rush to get out of the way at Red Lake, I inadvertently filled the wrong tank, the one I'd barely used. Fortunately, Oxford House lies right on my course, and after fighting the headwind for hours, I finally circle the settlement to attract attention, and then land close to the Northern Store.

The clear waters of Oxford Lake reveal shallows that ground the Cub while it's a hundred feet from shore. Removing my boots and socks, I retrieve two collapsible gasoline jugs from the baggage compartment, roll up my pants and step into the frigid water. There's nothing to tie to, so I pull the Cub toward shore until it's firmly grounded. With bags and boots in hand, I wade ashore, where I'm met by a smiling Cree in a 4 x 4 Explorer, who offers a ride to the mayfly-dotted Northern Store. (If they're mayflies, why are they here in July? Because mayflies were named by folks in the southerly states where they hatch in May. Minnesota mayflies appear in June, but up here they arrive in July.)

Bill is the local constable, so he knows the ropes. He tells me I have to pay before I fill the bags, which I gladly do. I'd like to stay for a visit, but it's getting late, and if I'm to reach Ilford by dark, I need to get moving. Unfortunately, the bags' small spigots slow the flow, so to save time, I decide that one bag will do, toss the second into the back seat and take off.

An hour later, as the gas gauge readings descend, I chastise myself for not dumping both bags into the wings. Worse yet, there are few lakes from here to Ilford, so I land at the next, dump in the second bag while the wind shoves me back toward a swampy shore, and then return to the air. Finally, after fighting headwinds for five hours, Ilford crawls into view as the sun angles slowly down toward the black spruce horizon.

As I circle the town to alert someone to pick me up at Moosenose Lake, I get yet another surprise—the rustic Gold Trail Hotel™ where I've spent so many pleasant nights is gone, replaced by a charred hole in the ground.

Were I extra cautious, I'd stop for the night, put up my tent, buy more gas in the morning and leave, but it's just forty-two miles to Gillam. The gas gauges look pretty good, and when I turn toward Gillam, the wind, which is dying, will come from the side. Decision made, I head for Gillam, following the railroad that leads beyond Gillam to Churchill and the western shore of Hudson Bay.

My groundspeed climbs to 87 mph. I fly on the one-eighth-full tank, holding the emptier tank in reserve. If the engine falters, I'll switch tanks and land on the first lake that's close to the tracks. If worse comes to worse, and both gauges are lying, I'll land on the tracks when the engine dies, then flag down the Muskeg Express before it mangles the Cub. The Cub, being light, could easily be dragged from the tracks by the crew or passengers, who would have an interesting story to tell.

Forty-two miles at 87 mph should take twenty-nine minutes, and as the twilight fades, I treasure the softening light. A railroad milepost called Nonsuch finally passes, and as the Nelson River creeps into view, I remember that the *Nonsuch* was the first ship to return to England (in 1668) with an eye-popping load of New World furs. Commanded by Captain Zachariah Gillam, the *Nonsuch* was a fifty-footer (we have semis longer than that) with a gross weight of 43 tons. Worse yet, the *Nonsuch* was slow and hard to maneuver—definitely not a vessel that I'd want to take to sea.

When Gillam appears, I still have plenty of fuel, but now I've a different concern: Will there be enough light? Ten minutes later, the wind drops to zero, street lights appear, and in the last of the twilight, the Cub whispers down from the purpling sky, skims the tips of the lakeshore

piners and skids across the mirror-smooth waters of Gillam's Landing Lake.

The weather-beaten shack that serves as the seaplane base office of Gillam Air isn't locked. (In fairness, their main airport office is first rate.) Fortunately, the phone works, and after fueling the Cub (and learning that I had fifty miles of fuel remaining despite my worrying), I'm soon talking with the G & G taxi driver, who delivers bad news: There's a funeral tomorrow for a well-known Cree, so the Gillam Motor Inn and the Aurora Gardens Motel are full. Worse yet, when I call the DOT to close my flight plan and ask why they didn't answer my radio calls, they tell me I wasn't heard. I can't believe that there's really no room in the inn for a weary traveler, so, I grab my radio and slide into the cab.

The clerk at the Gillam Inn is sympathetic, but confirms that they're really full. She lets me use her phone to call the Aurora Gardens Motel, and then takes pity on me when I get the same response.

"Listen," she says, "try Doug's Lodge."

"Where's that," I ask.

"It's 'round in back of the Inn—just an old house with a bunch of rooms that Doug sometimes rents. I'll give you the number, but you'd better let the phone ring, 'cause he's probably already in bed."

On the eighth ring, Doug MacRae, a retired contractor, grumbles hello and reluctantly takes me in. A large sign on his fence warns "Beware of Dog," but tail-wagging "Goofy," a yellow lab, presents no threat. At sixty-five pounds, he's just a big lover.

Doug's "lodge" is a one-story house surrounded by heaps of junk and a four-foot fence, but its three tiny bedrooms are neat and clean, so I'm pleased to stay. And at \$30 a night, it's a bargain. As I crawl into bed, I wonder what has happened to my transmitter, and how can I get it repaired?