



AN AMAZING
NEW HOBBY:

Ham Radio for the whole family

Don't read this article unless you and your family dare to embark on a breath-taking 'round the world adventure. More than 120,000 other Americans have already signed up. It's full of excitement and one of the most worthwhile experiences you'll ever have

BY WALKER A. TOMPKINS

THE fifth-graders were studying Africa. "Sandra," the teacher asked one of her straight-A geography experts, "suppose you tell the class what you know about Liberia."

Sandra peeped at her notes. "Well," she began, "Liberia is on the west coast of Africa and it is

about the size of Ohio. Most of its inhabitants are savage cannibals who hide in the jungles. It is near the Equator, so the weather is terribly hot the year 'round . . ."

Ten-year-old Bobby Fiske frowned and began to squirm.

"Bobby seems to differ with you, Sandra," the teacher laughed.

"Shall we get his views on what Liberia is like?"

Bobby stood up eagerly. "Well, Sandy may be right about some things," he conceded, "but I was talking to a boy in Liberia yesterday—his name is Jimmy Dawe and his father works for an American rubber plantation. He said March was their hottest month and even then it never got much over 80 degrees. I would have found out a lot more, only about then Mom called me to supper . . ."

No one laughed. Bobby's classmates were impressed, but not skeptical. They had listened enthralled to Bobby's recounting other surprising conversations he had had this semester—with a Finnish fish-



erman off the Alaskan coast, a Siberian farmer boy behind the Iron Curtain, a GI stationed on Okinawa and many more.

These chats were not flights of imagination. They took place regularly at the Fiske house. For Bobby, along with 120,000 other Americans between the ages of 7 and 87, was a "ham" radio operator who owned his private home station.

Only recently has ham radio come into its own as a hobby the entire family can share. The popularity of amateur radio is snowballing as thousands of parents and teen-agers discover this most fascinating and democratic of pastimes. Its devotees are young and old of both sexes, the rich and the poor, the rural as well as the city dweller.

What better way to feel close to people the world around than by speaking together? Voices flashing around the globe in an instant, scorning distance, vaulting political borders. This is actually putting the "One World" concept into everyday

use. Here is a fraternity you can join. Our government wants you to join—and has made the way easy.

"Hamming" is as old as radio. But the stimulus that lifted it from the little-known hobby of the few to the pleasure of the average family was the authorization, in July 1951, of the "Novice" apprentice license by the Federal Communications Commission.

This beginner's license was intended to encourage the younger generation to become interested in electronics. In an atomic age, our national survival may well depend upon having a reservoir of trained technicians in peace and war. Most governments recognize this need; the only countries forbidding their radio amateurs to talk beyond their borders are Indonesia, Indochina, Thailand, Iran and Korea.

The new Novice license brought a deluge of 1,000 applications a month to FCC (Federal Communications Commission) from every corner of this country. Teen-agers who had been frittering away their

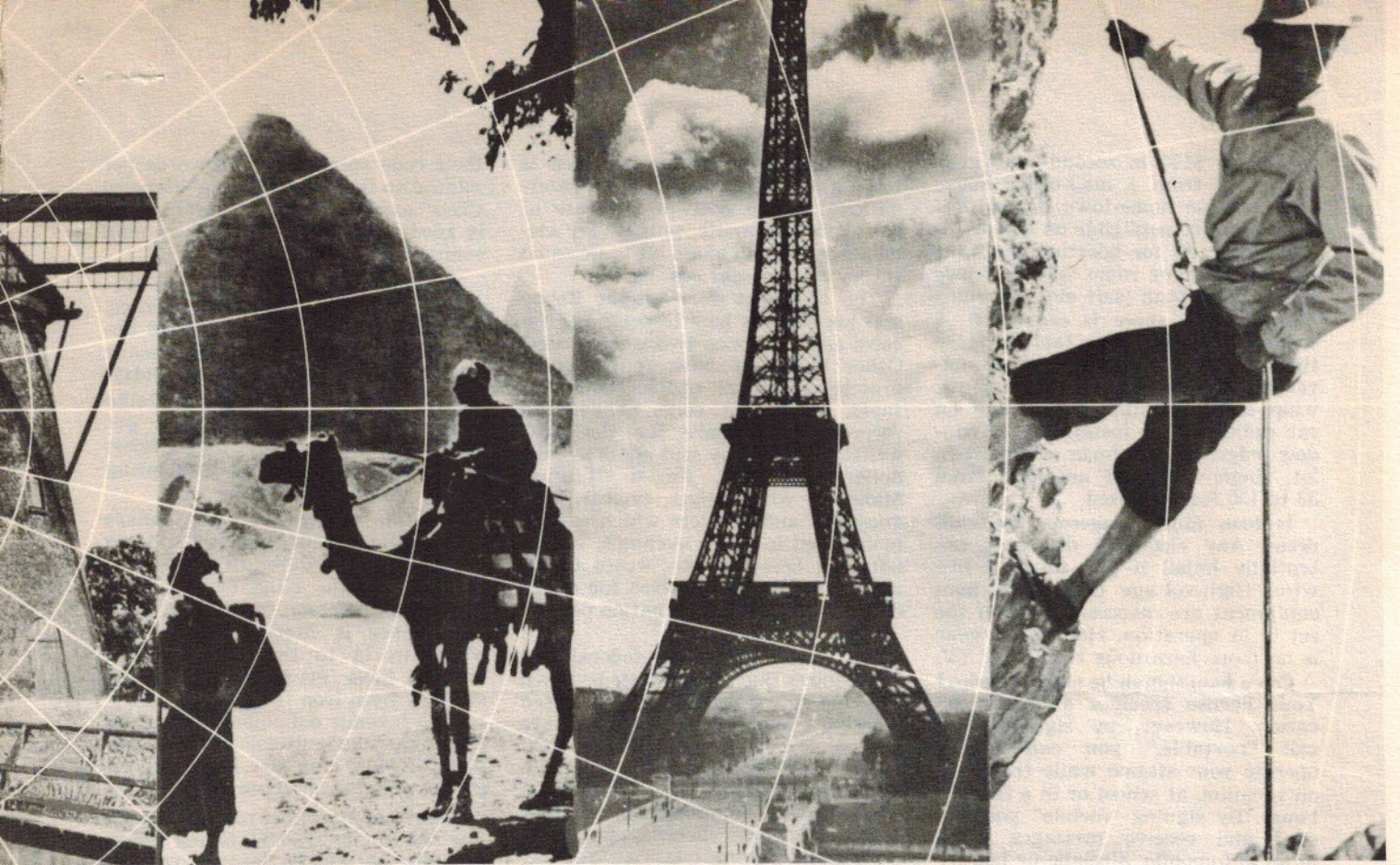
leisure time began to crowd the examination rooms.

FCC officials were delighted. But an unexpected trend manifested itself early. Half of these newcomers were grownups! Fathers who hadn't known enough about electricity to fix a lamp cord found themselves relaying amateur message traffic and having the time of their lives. Mothers found bridge clubs rather dull after picking up a microphone and swapping recipes and ideas on bringing up children with another housewife a thousand miles away.

What is this universal appeal of ham radio? The answers are as varied as individual temperaments.

Bobby Fiske, who had a ham friend in Liberia, enjoys most "working DX (distance)"—chatting with fellow amateurs around the globe from the privacy of his own home, day or night, the year 'round. His inability to speaking anything but English proved to be no handicap at all; ham radio long ago discovered how to topple the Tower of Babel.

For there is a magic key which unlocks the doors of international understanding and fellowship. It is the "International Q-Code"—a list of



PHOTOGRAPH BY ROBERT JAMES WITT

simple three-letter symbols with universal meanings. For instance, "QTH" means "Where do you live?" to Hottentot or Hungarian, Arab or Eskimo, Zulu or Japanese. Similarly, "QRT" means "I must stop now": "QRX," "Please wait a moment."

We Americans use a dot-and-dash slang all our own. Every male operator is an OM (Old Man) regardless of age. A YL is a young lady operator, who becomes an XYL when she marries. HI is the Morse code chuckle, HI HI is a resounding guffaw. FB means "fine business!" The numerals 73 mean "best regards" while 88 is translated "love and kisses." BCNU, could only be hamese for "I'll be seein' you!"

Many people are just natural born collectors—they treasure stamps, coins, insects or autographs. This type of person enjoys the ham custom of swapping "QSL cards." When two hams contact each other over the air, they usually confirm this by exchanging postcards bearing their call letters and other information. Visit any ham's "shack" (the name given his radio room, be it in a cold-water flat or a millionaire's penthouse) and you will probably find the

walls papered with QSL cards. The same hobby is enjoyed by thousands of SWL's, or Short-Wave Listeners.

The fascination of ham radio to those of mechanical or inventive bent is obvious. Most hams build their own sending sets. The gadget-lover is in seventh heaven while hamming. Radar and television owe their rapid growth to early pioneering by amateur experimenters. Short-wave communication is a ham product.

Hams are no longer content to merely girdle the globe; they are now eyeing the universe. Two young hams in Falls Church, Virginia, recently beamed their signals into outer space and, three seconds later, experienced the fantastic thrill of hearing their message echo back from the moon—after a round trip of 478,000 miles!

But getting back to earth—how would you go about taking up amateur radio as a family hobby?

Bobby Fiske's case is typical. He was exposed to the radio "bug" when a neighbor boy won his Boy Scout radio merit badge. Bobby at once clamored for a station of his own. But Mr. and Mrs. Fiske, well aware of Bobby's fickle enthusiasms, were dubious. They compromised by rent-

ing a "communications receiver." (Your ordinary home radio will not tune in the amateur wave lengths between 200 and 10 meters). Bobby was now a Short-Wave Listener.

Out of idle curiosity, Bobby's parents listened too. They heard the southern drawl of a Georgia tobacco grower arguing baseball with a Boston fan with a Back Bay accent. A Kansas wheat farmer was bringing an Idaho lumberjack up to date on Dick Tracy. And then the Fiskes heard their next door neighbor in a round-table chat with amateurs in Cairo, London and Buenos Aires!

It didn't take many evenings of this for the whole Fiske family to succumb to an irresistible urge to join the fun. But Mrs. Fiske had to be practical. This hobby seemed too good to be true. Before investing time and money on ham radio, Mrs. Fiske had a few questions she wanted answered in advance:

How much does ham radio cost?

A basic station—receiver, transmitter and antenna—sells from \$45 up in build-yourself kits. Factory equipment is priced from \$100 to \$3,000. The average ham has an investment

of around \$100 in second-hand gear purchased from a mail-order house or a reliable home-town dealer. Repair costs are negligible on a year-to-year basis. As for boosting the light bill, an amateur radio station draws less current than your electric iron.

How much space is required? A writing desk or bridge table is more than ample room for even an advanced station. In city apartments, whip antennas similar to those on car radios can be installed on a window ledge. On the farm or suburban lot, single-wire roof antennas from 33 to 135 feet are used.

Is ham radio dangerous for children? Any electrical device is potentially lethal if you touch a live wire. High-voltage circuits in ham equipment are inaccessible when the set is in operation. Ham radio gear is no more hazardous than your TV.

Can a ham station be taken on trips? Your license specifies a "fixed" location. However, by signing your call "portable," you can legally operate your station while traveling, on vacation, at school or in a friend's house. By signing "mobile" you can send and receive messages while in an automobile, airplane or boat.

Local civil defense, Red Cross, Boy Scouts or Police Department will be happy to sign you up for emergency duty—especially if you have a miniature transmitter and receiver in your car. FCC records are replete with heroic tales of the roles played by hams during floods, earthquakes, fires, hurricanes, or epidemics.

With these thoughts in mind, Bobby Fiske's mother decided ham radio was worthwhile. So Bobby took the next step: He sent away for a copy of the booklet, "How To Become a Radio Amateur." This booklet and other literature on ham radio may be obtained from the American Radio Relay League, West Hartford 7, Connecticut. Special questions submitted by mail are answered by their Technical Information Service. The booklet Bobby received explains in the simplest terms what makes radio work; it shows how to build a receiver for around \$15, a transmitter for even less. It also told Bobby that ham radio is the only hobby which requires a federal license to practice—and explained the Novice Class.

The Fiskes learned that all you

have to do to get a Novice license is to be able to send and receive International Morse code at the rate of five words a minute, plus a very elementary written exam on basic radio theory and federal regulations.

The boy next door taught Bobby and his parents how to send and receive code in about two weeks' time. Other beginners have rented code-practice machines utilizing punched tapes, or Morse code phonograph records. To prepare for the FCC written test, Bobby sent another half-dollar to ARRL for a "License Manual," which gives typical FCC questions and answers which can be memorized in a few evenings. It was not long before Bobby wrote to his nearest FCC district office for application forms and examination papers.

SINCE June 10, 1954, federal law requires that Novice tests be taken at home, in the presence of a licensed amateur. The notarized papers are mailed back to the District FCC office. Those who flunk can try again in 30 days. There are no fees in connection with obtaining an amateur radio operator's license, but only American citizens qualify.

While impatiently waiting for their licenses and station calls to arrive—it took three weeks—Bobby and his father built a transmitter from the illustrated directions in their ARRL beginner's booklet.

Few experiences in life can equal for thrills and suspense the moment when the mailman brings your "ticket" and you switch in your key or microphone to put your first CQ (calling all stations!) on the air. Who will answer? It may be a movie star in Hollywood or a cowboy on an isolated Arizona ranch.

Fortunately for families on modest incomes, long-distance radio contacts do not depend on high power or fancy equipment. A home-made 20-watt "rig" circles the world as does a deluxe 1,000 watt. The relative unimportance of power, per se, is one of radio's happy paradoxes.

THE Novice license intended only as a means of giving you on-the-air experience, expires in one year and cannot be renewed. By that time, however, most hams have absorbed enough advanced theory and built

their code speed up to 13 words per minute so they can pass the "General Class" examination. A General license is good for life, if renewed by mail every five years.

Eight-year-old boys and girls frequently win their General licenses, but the ages between 10 and 16 appear to be average. Adults have made the grade after their 80th birthday.

Most cities have Amateur Radio Clubs where local enthusiasts get together. More and more high schools are giving radio courses, graduating pupils as licensed hams.

Doctors recognize ham radio's therapeutic benefits and it is being encouraged in Veterans' hospitals. For the spastic, blind or otherwise handicapped person, radio is a God-send, since it literally brings the whole world to the shut-in. Polio victims have even operated radio stations from iron lungs! As a deterrent to juvenile delinquency, amateur radio has the enthusiastic endorsement of PTA, churches, social service groups and law-enforcement agencies.

Hamming has long-range benefits. For the young student facing Selective Service, a radio license gives him a tremendous jump over non-hams, since the Armed Forces are hard pressed to find trained communications personnel. And in this scientific age, radio, television, radar and allied fields offer unlimited opportunities.

There is unexpected drama at your fingertips, too. Don Wherry, a school-boy living on a farm near Churdan, Iowa, was idly tuning his home-made set one night when his earphones picked up an SOS from a Norwegian whaling ship, sinking in icy seas north of the Arctic Circle.

When no one answered the distress call, Don relayed the ship's position to a fellow ham in New Jersey. Within the hour the U.S. Coast Guard had contacted another whaler in the vicinity of the doomed vessel, whose wireless operator, due to a freak of atmospherics, had not heard the Norwegian's feeble signal. All hands were rescued—and a hero's medal went to Don Wherry!

Just one word of warning: If you expose yourself to ham radio you are lost! Once a ham, always a ham. Good luck—BCNU and very 73!