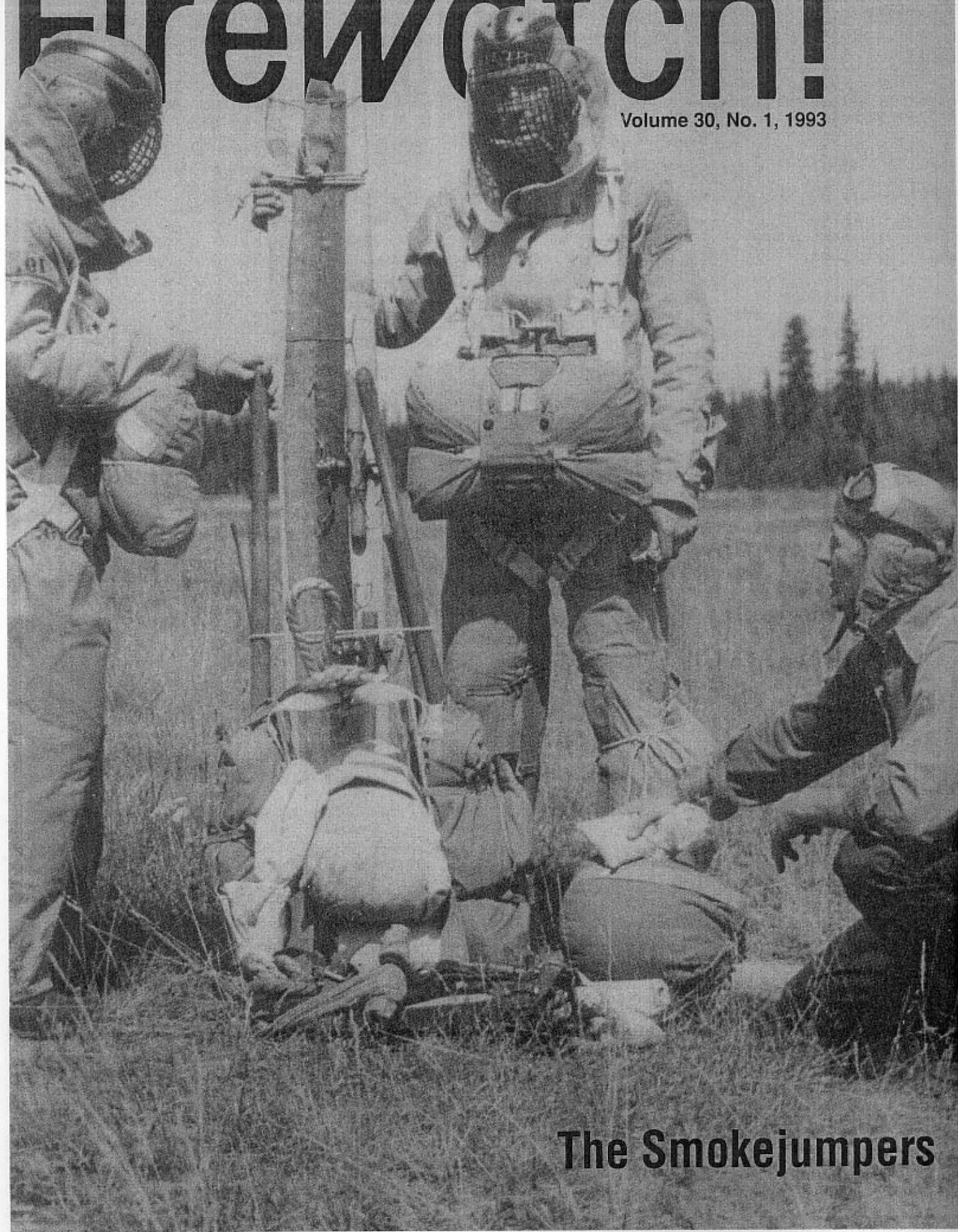


Firewatch!

Volume 30, No. 1, 1993



The Smokejumpers

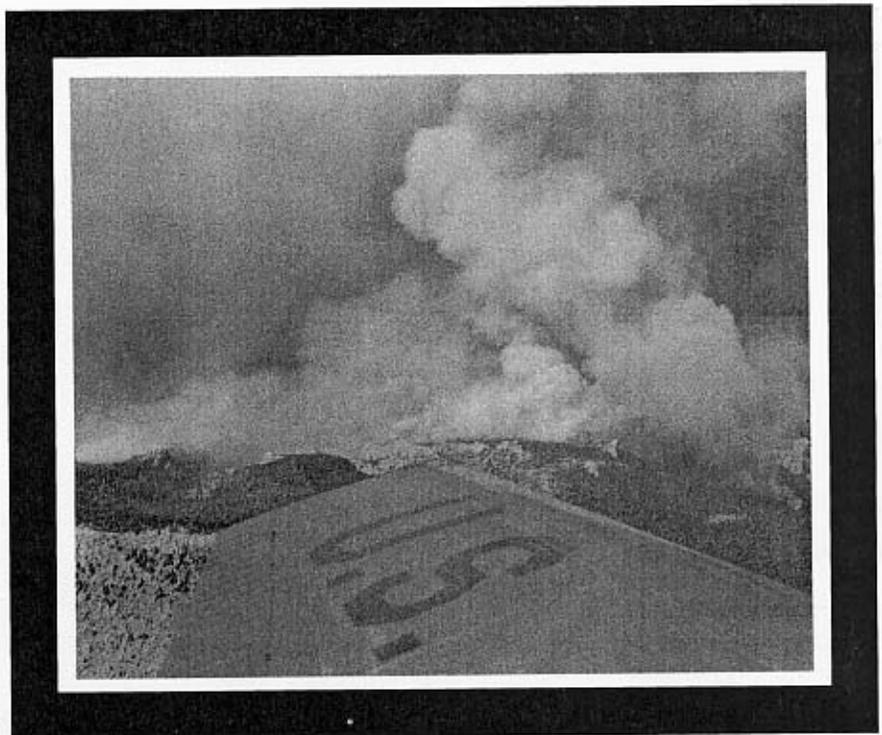
The Smokejumpers

by EVA HOFMANN
and MARY McDONOUGH

Thirteen crumbling crosses mark the hillside of Mann Gulch in Helena National Forest, Montana, where 12 smokejumpers and one Forest Service guard lost their lives in one of history's most compelling and controversial fires. On August 5, 1949, flames swept the gulch, a roadless area just east of the Missouri River. The young, inexperienced crew of 15 Smokejumpers and one Forest Service guard were called to confront the conflagration that was to become the basis for the Norman Maclean novel, *Young Men and Fire*.

Best known for the modern classic *A River Runs Through It*, Maclean first saw the Mann Gulch fire as it still burned in mid-August of 1949. The author himself was in his 40s at the time — more than twice the age of most of the young heroes who perished in the blaze.

MacLean grew up in the Western Rocky Mountains of Montana and worked for years in logging camps and for the U.S. Forest Service. He went on to become a scholar, working and teaching at the University of Chicago before retiring to focus on writing in 1973. He spent the final 14 years of his life tracking, studying and reliving it the Mann Gulch disaster. "If you had known something about wildfire, you already would have seen spot fires twisting themselves into fire swirls and fire swirls converging upon themselves," writes Maclean in *Young Men and Fire*. "But viewing total conflagration is literally blinding, as sight becomes sound and the roar of the fire goes out of the



The Mann Gulch fire as seen from the air, August, 1949. Photograph courtesy United States Department of Agriculture Forest Service.

head of the gulch and away and beyond, far away. The last you saw of the ground was a mole coming out of the smoke, a little more terrified than you, debating which way to go and ending the argument with itself forever by turning back into the impenetrable fire. So it is, when you cannot see the fire because of the smoke, sight becomes sound. You hear the fire as a roar of an animal without the animal or as an attacking army blown up by the explo-

sion of its own ammunition dump."

The smokejumper base in Missoula, Montana, was hot and crackling dry on August 5. "That summer had been one of the driest in the history of the West," said Carl Gidlund, author and public affairs officer for the National Forests and Grasslands in Texas. "The thunderstorm that had passed over the Rockies the night before had left little moisture. It had, however, left a line of fires, started by lightning, on the region's tim-

The Firewatch! staff thanks NAFED member Ben Larango, Missoula Fire Equipment, Missoula, Montana, for providing contacts and helping with the research of this article.

bered slopes.”

Smokejumper Eldon Diettert, a forestry major at the University of Montana, was celebrating his 19th birthday with his family when he got the call. The Mann Gulch fire was his first jump — and his last.

Eldon's brother, Jerry Diettert, now a retired physician and author residing in Missoula, recalls that the summer of 1949 was “extremely hot — probably over 100 degrees. We don't get much rain in July and August, so it had been quite a while since it had rained, and it had been hot for a long time.”

Most of the 135 jumpers stationed in Missoula had been dropped on fires when the base dispatcher received a call from the Helena National Forest at 1:50 p.m. Helena asked for 25 men to fight a fire on a ridge above Mann Gulch, a long gully draining from the northeast into the Missouri River in the “Gates of the Mountains” area near Helena.

But only one plane was available — a C-47 capable of carrying 16 fully equipped smoke jumpers.

The plane was circling a fire that was from 50 to 60 acres in size. One of the few surviving jumpers, Earl Cooley of Hamilton, Montana, recollected his comments as he viewed the fire from the C-47. “I commented that it wasn't burning too fast, that it looked like just a good mop-up job.”

In the Spring following the Mann Gulch fire, Jerry Diettert went with smokejumper foreman R. Wagner Dodge to visit the site where his brother died. He noted that the hillside was

“extremely steep, and the fire was below them so it could climb uphill easily. The topography in the Mann Gulch is such that the wind makes a movement from going downriver to turning up the hillside. This just aggravated the fire's

“For some reason — who knows why — Eldon decided it wasn't the thing to do and angled farther up to the right toward the summit just a short distance away. That's where his body was found.

“Until my mother got the call about my brother's death on August 7, we were pretty much in the dark, and had no idea whether he was alive or dead, though we had heard there was a tragedy at the Mann Gulch fire.”

The Mann Gulch fire's notoriety can be partially attributed to the fact that by 1949, technology had advanced to the extent that news of the fire could spread as quickly as the blaze itself. The reports reached as far as the East Coast the very same day the tragic fire started.

Ironically, however, technology had not advanced enough to keep the crew in contact with one another as they landed. The 1949 crew found themselves spread out at times, each one on his own, as the fire fueled the chaos that grew within them on the smoke-filled hillside.

Today, with the advanced technology available, smokejumping crews are able to keep in close proximity to one another and their pilot through radio.

Another reason for this disaster's historical prominence is the fact that

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spread up the slope.”

“My brother was with the two men who escaped the fire. They escaped through a rift — a ledge of rocks at the top with a narrow crack, which they managed to slip through,” said Diettert.

smokejumping was still evolving as a revolutionary technique of attacking fire from a different angle.

The Smokejumpers were formed in 1940 in an effort to confront fire from the air before combating it on foot. The first smokejumpers were airshow daredevils and stunt men, and were introduced by the U.S. government as an experimental fire-fighting crew.

The first jump took place when Earl Cooley of Hamilton, Montana and Rufus Robinson of Kooskia, Idaho, "stepped into space" over the Martin Creek Fire in the Nezperce National Forest on the first fire jump. The potential of the new initial-attack method of fire control was not clear. However, that year 12 smokejumpers made 99 fire jumps to establish the aerial fire fighting force that we know today.

Today, there are approximately 400 smokejumpers nationwide, 15 of whom are women, with about 70 located in Missoula, which is still the smokejump center of the world. In 1992, those jumpers made a total of 6,059 training, fire and rescue jumps. With 230,476 jumps since 1940, only three smokejumpers have been killed as a result of the jump itself. To date, the only fire-related deaths were the ones caused by the Mann Gulch fire of 1949.

As NAFED members know, fire conditions are not always the same. Some fires burn and spread more rapidly than others, requiring two, four, eight or 16-man crews to control and stop them. On some fires, jumpers handle suppression from discovery through mop-up. At other times they jump to establish control and are later relieved by district crews. Or they may literally "jump in" to assist fire fighters already working on a large fire.

In years of extreme fire danger, smokejumper crews from any one of 11 smokejumper centers (two of which operate only during extreme fire situations) can assist with a local fire situation. It is not uncommon for smokejumpers to jump on fires in New Mexico, Alaska, Montana, Idaho, Washington and Oregon in the same summer.

In her book, *The Smokejumpers*, Joan Hanson explains that the first fire jumps in 1940 were preceded by several years of experimental fire control activities in the Forest Service. Parachutes had been used for dropping supplies and equipment to fire fighters for quite a few years. But before people could use them for fighting fires, the parachutes

had to be more effectively designed to provide less shock on opening, a slower rate of descent and better maneuverability to provide a controlled landing. The jumper had to be provided with equipment that would best protect him when descending into timber and mountainous terrain.

Since 1941 when the Forest Service transferred its aerial fire control project to Missoula, Montana, smokejumping has evolved steadily, with the exception of World War II manpower shortages and occasional slow fire seasons brought on by weather conditions.

According to Hanson, parachutes and airplanes have been essential to the development of smokejumping. The earliest parachute used by smokejumpers was a flat 30-foot Eagle backpack with a 27-foot reserve chestpack. It was opened manually by pulling the ripcord. When it did open, the opening shock was exceptionally strong, leaving bruises and sore shoulders. In 1941, one of the first improvements on the Eagle was the development of a static line that automatically opened the chute.

Today's smokejumpers use two kinds of chutes. One is the Quantum, a square chute used only by the Bureau of Land Management, located in Boise, Idaho, and Fairbanks, Alaska. The other is the FS-12, a round parachute used by the Forest Service and designed in 1979. According to Wayne Williams of the U.S. Department of Agriculture Forest Service in Missoula, Montana, a new round parachute, the Concept 5, is on the horizon and is expected to be in use some time during the summer of 1993.

One of the first planes used for smokejumping was the Ford Tri-motor, which carried eight jumpers. The Curtis Travelaire and the Noordyn-Norseman were initially used for two to four jumpers. These first airplanes were slow-flying, highly maneuverable, and could land in the small back-country airstrips. As the program grew, each region came to select its own airplanes. Today, some planes are purchased by the Forest Service and some bases contract planes from private companies.

When flying over a fire, smokejumpers circle the fire, getting as close as possible to the flames on the ground without endangering aircraft and crew. A smokejumper's actual flight from aircraft to the burning ground takes only about one minute. After dropping its

cargo of jumpers, the plane continues to circle the designated spot, dropping the remaining cargo and necessary equipment.

Smokejumpers must meet several qualifications, the most important of which is 3-8 years of fire experience. Prior parachute experience is not required.

The training of smokejumper candidates and returning smokejumpers begins with a physical fitness test. This includes running a mile and a half in 11 minutes or less, performing 45 sit-ups, seven pull-ups and 25 push-ups. "This is the easiest part of the training," said Williams. "We usually have a 20 percent to 50 percent 'wash-out' rate of new recruits during the training period itself. That is, if we accept 40 smokejumper candidates for training, 20 may not make it through. We accept trainees based on this rate."

After meeting physical fitness requirements, returning smokejumpers continue refresher training in parachute techniques and by mid-week are ready for three proficiency jumps in preparation for the fire season. Classroom instruction in fire behavior, firefighting techniques, the use of power saws and pumps, and a review of the first aid and emergency care is also provided. After 10 days of training, these jumpers are available for fire assignment anywhere in the western United States.

The number of new smokejumpers trained each season depends on the number of returning smokejumpers. This number varies from year to year and from base to base. During new-man training, which lasts approximately three weeks, smokejumper candidates first receive classroom instruction and field experience in fire behavior, fire suppression techniques, first aid and the use of hand and power tools. At the same time they commence training for actual parachute jumping.

By the third week of training, aspiring jumpers have been prepared to take the first jump from the airplane. Seven to 10 proficiency jumps over the next two weeks prepare them for the job. Each training jump is made into a smaller target area, increasingly representative of an actual fire situation. One of the last jumps is made into a thick growth of trees, causing most parachutes to land in the treetops and necessitating letdown practice. Training also includes tree climbing with spurs to retrieve parachutes that may

have landed in trees.

Specialized equipment is used by smokejumpers. The jumpsuit is used only enroute by airplane and during the actual jump, and is designed to provide protection upon landing or flotation of the jumper in case of accidental landing in deep water. A high collar protects the neck when the parachute opens and in case of a tree landing. Each trouser leg has a full-length zipper for quick and easy removal. The smokejumper also wears a helmet with a wire mesh face mask, and tight leather gloves during the jump. The parachute harness is placed over the jumpsuit. The main parachute, attached to this harness with capewells, is worn on the back. The reserve is attached to the front harness by snaps and D-rings. Also attached under the reserve is a small personal gear bag. After landing, the smokejumper removes parachutes, personal gear bag, harness, and jumpsuit, and he is ready for action. Underneath the jumpsuit he wears a fire-resistant shirt and trousers, as well as logger boots. A hard hat is carried in his personal gear bag.

A firepack for every two jumpers is dropped by cargo chute on each fire.

This pack includes two pulaskis (combination axe and mattock used to dig fire-line and handle mop-up, designed by a ranger named Pulaski), one shovel, two sleeping bags, two flashlights, a file for tool sharpening, freeze-dried food for two jumpers for three days, and four gallons of water. Additional equipment packaged separately such as chainsaws, tree-climbing spurs, or cross-cut saws may be dropped as requested.

The first smokejumpers were mostly from the western United States. Some became associated through their study of forestry. During World War II many of these trained men left for military service, but at the same time a number of conscientious objectors began looking for opportunities to serve their country. They were willing to involve themselves in risk, but wanted to do it through peaceful means. So a new source of manpower became available.

Since World War II, smokejumper trainees have come from all over the United States. There have been college students, some of whom were students of forestry, and teachers who also sought summer work. Then there have been men who just thought the job looked good. Since the 1950s smoke-

jumpers have come from places such as Pennsylvania, New York, South Carolina, Alabama, Oklahoma, Texas, Minnesota, North Dakota, and the western states.

Today, too, smokejumpers come for good summer jobs. Some also have a real yearning to get into that mountainous back-country of the west. A few stay on at one of the jump centers to continue the program and development of smokejumping. Others have gone on to excel at more conventional professions.

There are no "typical" smokejumpers. They come from diverse locations with varying backgrounds and inclinations. Yet after a year or two, a common denominator develops, and the spirit of the group becomes more colorful. In their sharing of the good times or when they respond to meet the special needs of a friend, their camaraderie is unique and lasting. Whatever individual goals or purposes these jumpers have, they share a spirit through smokejumping that makes them truly one of a kind. ○



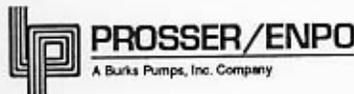
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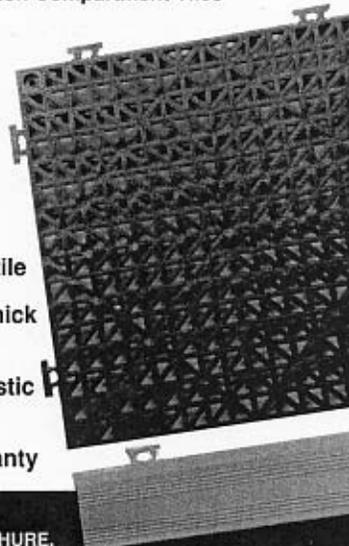
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