

RESCUE

From that point on, the rescuers faced few difficulties. The whites—including a Royal Canadian Mounted Police constable, the trading post manager and his wife, and a clerk—were evacuated by the plane, and the Eskimos were brought supplies.

Key to this successful rescue, as in many others equally spectacular, was the parachute. Without it, aerial rescue operations would often be impossible in remote regions where airmen are forced down or travelers stranded. In the Fort Ross rescue, an attempt to land the plane without expert guidance of the officer dropped by parachute might have ended in disaster.

The parachute is the cornerstone of rapidly ex-

Jumper lowers rope from 'chute. Below, huge messages tell story

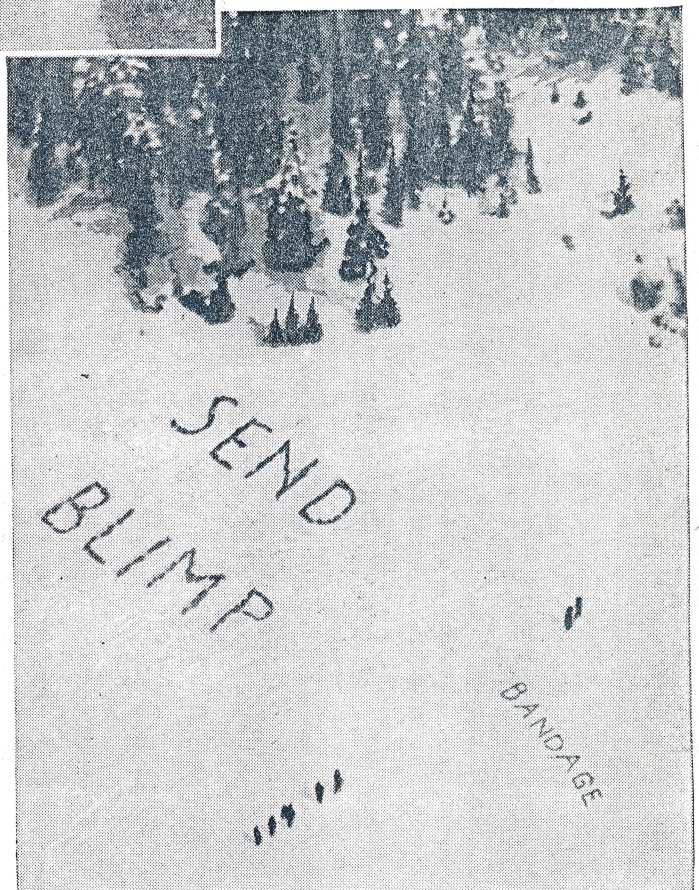


FOUR hundred miles north of the Arctic Circle—at Fort Ross, Hudson Bay Eskimo trading post and farthest north of Canadian settlements—four white persons, one a woman, and 50 natives were marooned.

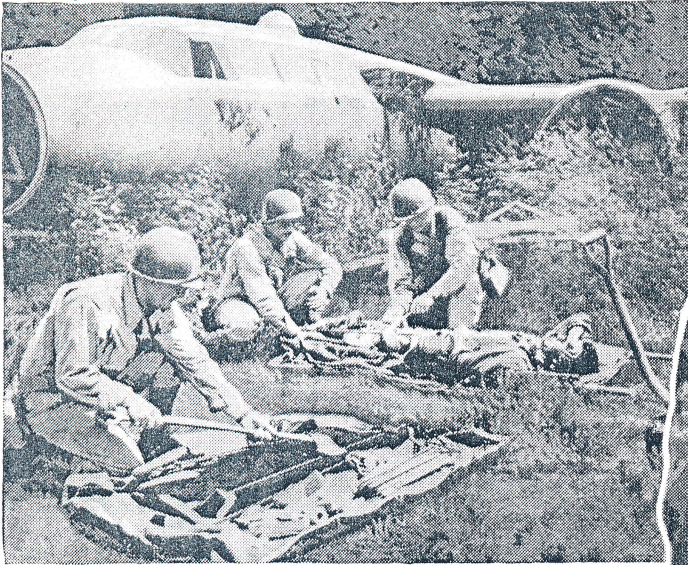
Eight days' food remained. Their supply ship, Nascopie, had failed to break through the ice to the northern tip of Boothia Peninsula on Bellot Strait, three miles from Hazard Bay where the post is situated. The Royal Canadian Air Force had no rescue plane available.

Only one hope remained—the U. S. Army Air Force, to which a rescue appeal was made.

Day and night, the stranded group watched the skies for help. At last a plane was sighted. But it did not land, for ice conditions were hazardous, even for a ski-equipped craft. Instead, by parachute, came 2,000 pounds of welcome supplies—and a U. S. Air Force officer. It was the officer's task to test the ice and select a suitable landing place, then to direct the plane from the ground. Next day, a safe runway was laid out on the ice and marked with bags of coal.



Paul E. Cooley - Smokejumper Mole Mont - 1948
Al Carne 1971
 from the **SKY...**



AAF rescue squadron applies first aid to "crash victim." Right, ready to go aloft is "para-rescuer" of Coast Guard

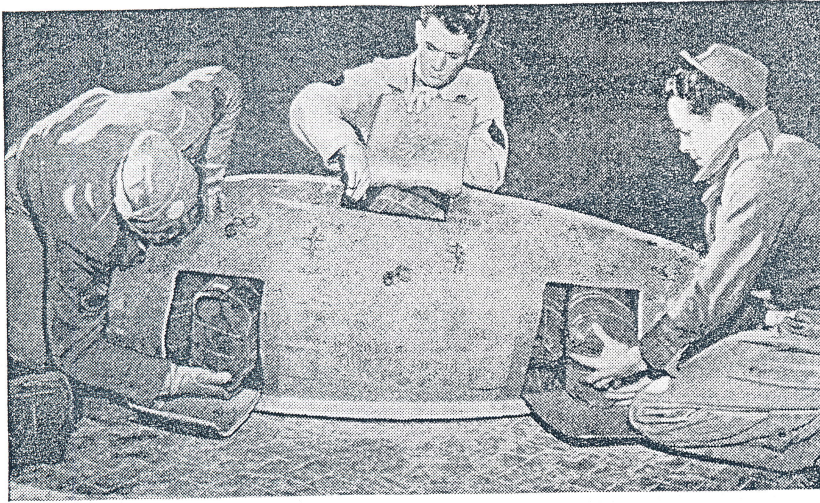
panding aerial rescue programs now extending to all branches of military and civilian aviation, and even to such organizations as the U. S. Forest Service. These programs will be a vital adjunct to postwar aviation when global air lines extend over Arctic wastes, little traveled seas and vast areas untouched by civilization.

Because of its widespread experience in training and employing "smoke jumpers" in fighting forest fires, the U. S. Forest Service of the Department of Agriculture has taken the lead in parachute rescue activities, and the Forest Serv-

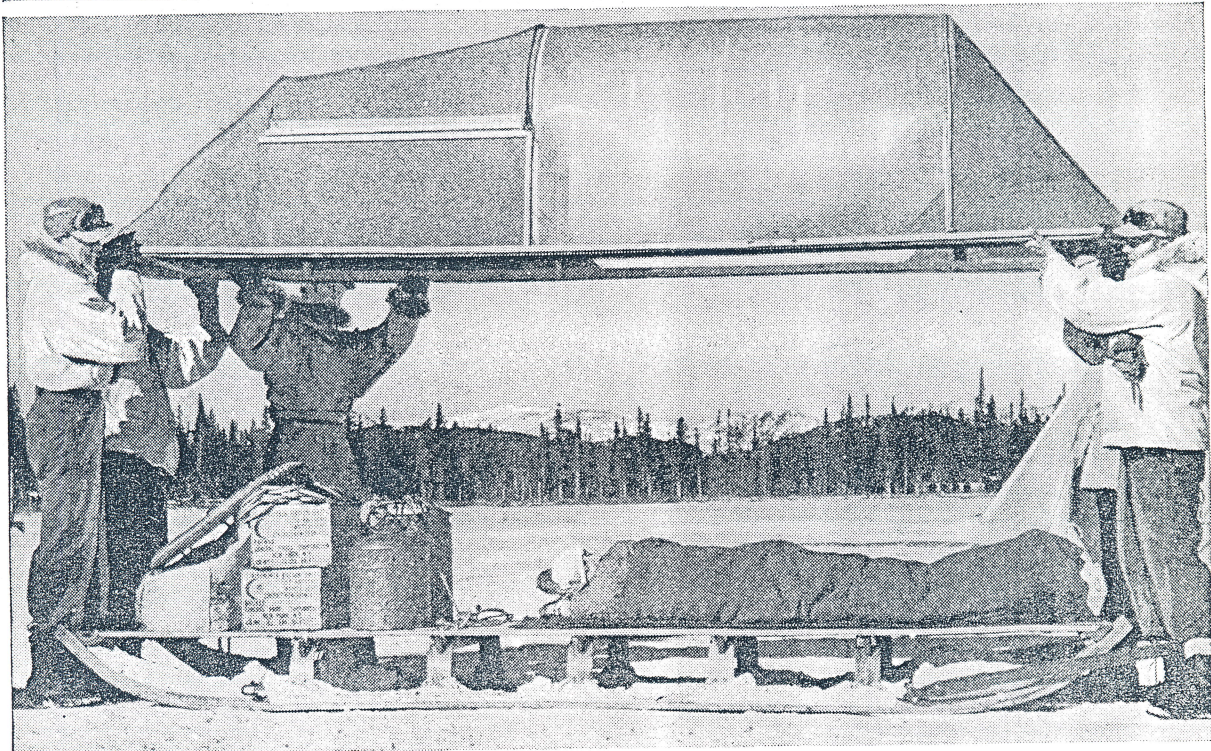
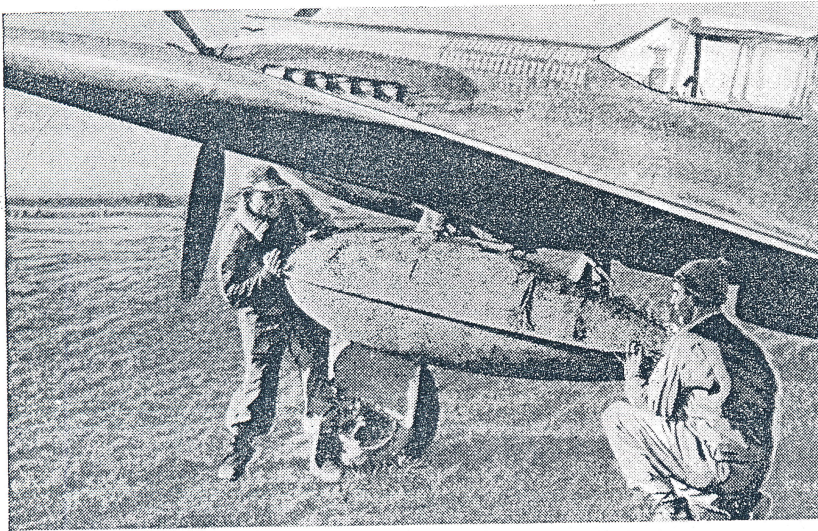


Dog team aids work of rescue crew training on snowy lake





Loading rations into auxiliary gas tanks to be dropped to paratroopers at advanced post. Tank is carried (below) on bomb rack under the wing



ice station at Seeley Lake, near Missoula, Mont., has become the major center for trainees.

The Forest Service "smoke jumper" methods of parachuting fully equipped men to remote areas were confined originally to work in mountainous and timbered regions during the summer when fire hazards are greatest. It has been found, however, that the same methods were easily adapted to the problem of dropping men and supplies, summer or winter, on any kind of terrain. A series of rigid tests confirmed the effectiveness of the system in winter with minor changes in equipment and technique.

The Forest Service works closely with the Emergency Rescue Branch of the Air Force in training personnel. In addition, the Coast Guard has trained representatives at Seeley Lake, and has established "Para-Rescuer"

Trainees lift cover of sled used to move injured flyers

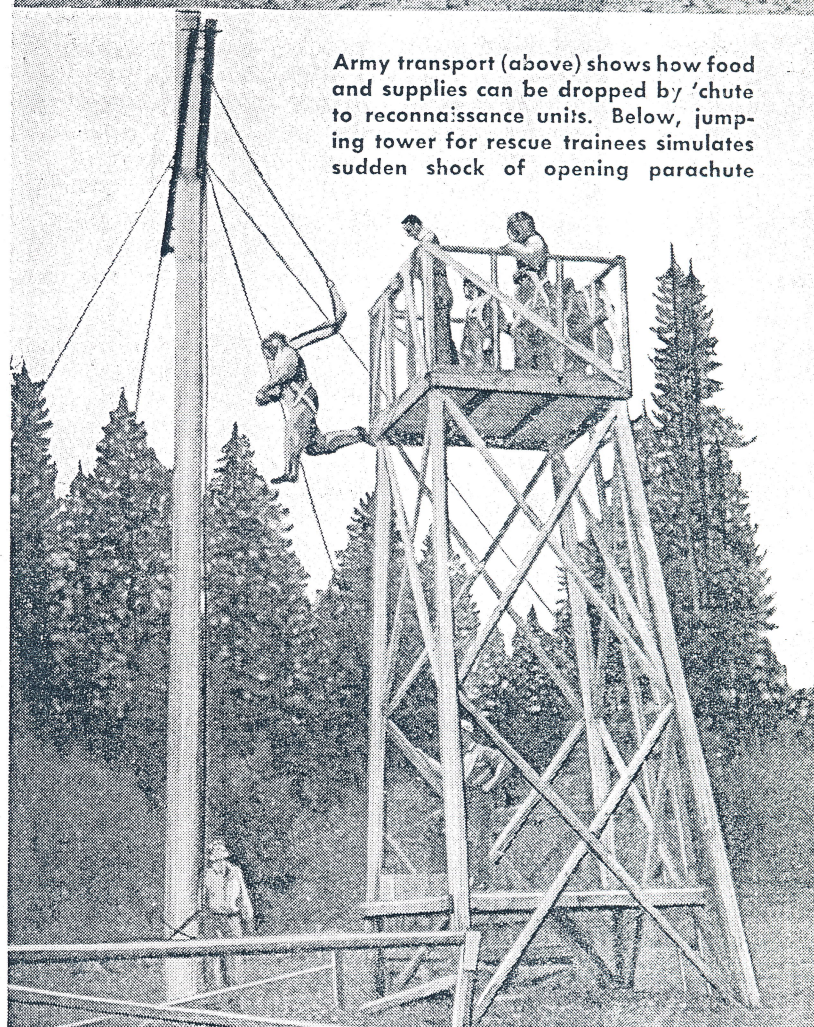
units, the first of which was assigned to duty at Ketchikan, Alaska. The Aeronautics Observation School at Edmonton, Alberta, has sent men to Seeley Lake for training and upon completion of their courses they give instruction to their co-workers in Canada. The same procedure has been followed by the Canadian Pacific Airways. The Army and Coast Guard have sent medical men for parachute rescue training, and the Forest Service has supplemented the 'chute work with courses in woodcraft.

Dropping food and supplies by parachute to stranded airmen and travelers has been done for years, but the technique has been improved. Results include greater accuracy in landing supplies and a careful selection of articles most needed by marooned persons in northern timberland, tropical jungles, Arctic regions, deserts and on the ocean. Two types of crash rescue kits have been developed by the Army Air Force and Forest Service. These include food and medical supplies, camp and trail equipment, radio communication kit, and other items.

The Air Force has produced two emergency parachute kits, one for jungle, and the other for Alaskan use. These include compass, matches, emergency rations, mosquito headnet, gloves, cooking kit, iodine, three-bladed knife, fish line and hooks, camphor gum, insect repellent, quinine, signal flare, machete, sharpening stone and first-aid kit. Particular attention has been paid to insect fighting equipment in Alaskan kits, as well as tropical, because in the summer there are 10



Army transport (above) shows how food and supplies can be dropped by 'chute to reconnaissance units. Below, jumping tower for rescue trainees simulates sudden shock of opening parachute





Yanks load medical rolls in plane ready to be dropped to advanced units

times as many mosquitoes per square mile over two-thirds of the land north of the tree line as in any equal area in the tropics.

A high percentage of air crews forced down at sea or in remote spots have been rescued by squadrons of the Emergency Rescue Branch of the Army Air Forces. In most of these rescues, parachutes were used in dropping supplies or personnel. Rescue squadrons have been activated in every theater of operations where AAF personnel are stationed. Medical men, navigators, radio technicians and persons familiar with the territory make up the squadrons, and all of them are thoroughly trained in the use of parachutes. The squads are reported to be excellent morale builders.

In the main, parachute rescue squads function as determiners of damage and injury resulting from plane crashes, and with the aid of medical jumping officers, provide first aid and emergency medical attention until ground crews are able to penetrate to the scene of the crash. Most rescue work involves injured men who not only need attention on the spot, but as-

Learning to manipulate rope to escape parachute in tree



sistance in traveling back to civilization. Therefore, special emphasis has been placed on first-aid training of jumpers and jumper training for physicians and surgeons.

Special training also is given in the use of parachute cloth itself, either by rescuers or by men marooned in spots after supplies are dropped. Several types of tents may be constructed of parachute cloth, or it may be used as head or body covering. Holes dug in the ground and lined with the cloth will collect rainwater. The tents can be used as fish nets—spread across narrow portions of small streams to trap fish as they swim downstream. On the desert,

spiral gaiters of parachute cloth keep sand out of shoes. Instructions for using the parachute are dropped with supplies.

At Seeley Lake, Mont., the Forest Service has a standard course for training jumpers for rescue work as well as for fighting forest fires. This is divided into two phases, ground training and jumper training.

The ground training occupies a minimum of six days prior to jumper training. A daily portion of the ground training is devoted to physical conditioning on an obsta-

cle course patterned after courses in use in armed service camps. Special attention is given to strengthening arm, leg and back muscles to withstand the rigors of landing and maneuvering the parachute canopy during descent.

Preliminary jump training is done from 25-foot towers. The men are fully equipped, and are stopped in their fall before they reach the ground by means of an overhead boom. This is to simulate the shock of the opening of the 'chute and to overcome the natural antipathy of the trainee to jumping from high objects.

The next training step is called "let-down" training. The trainee is fully dressed in jumping suit and is equipped with harness and chest pack. To the snaps on the shoulders of the harness a single-tree is attached by short lift webs and the single-tree is connected by block and tackle to a cable suspension line 30 feet in the air between two upright poles. The trainee is first hoisted a few feet off the ground and given instruction in the let-down procedure devised to permit jumpers to descend from high trees, using a 75-foot rope which is threaded through the harness and attached to the lift webs of the single-tree.

Considerable of the ground training time is spent in instructing jumpers in safe methods of climbing trees to retrieve their 'chutes without damage. The trainees are made thoroughly familiar with two types of radios used by jumpers. One is a compact, ultra-high-frequency set used for communication between jumpers on the ground and the plane overhead. The other is a medium frequency set for contact with bases up to 75 miles away.

Jumpers also are trained in the use of colored signal panels and code signals.

Advanced jumper training consists of from seven to twelve actual jumps. The first two are devoted to orientation of the men, and after that the instruction includes steering the 'chute, slipping the 'chute to lose altitude, stopping oscillation and other related actions during descent. The first six jumps are made on a cleared area, the rest into timber.

During the training, the more capable men are selected for spotter training to enable them to select jumping spots, determine wind drift with miniature drift chutes, and to time the jumps correctly to compensate for wind and other conditions. For jumps, the planes are slowed to around 70 miles per hour.

Forest Service parachute crews this year are made up largely of conscientious objectors who have volunteered for the work. Coast Guardsmen and other service personnel in training have responded to calls and jumped to fight forest fires.