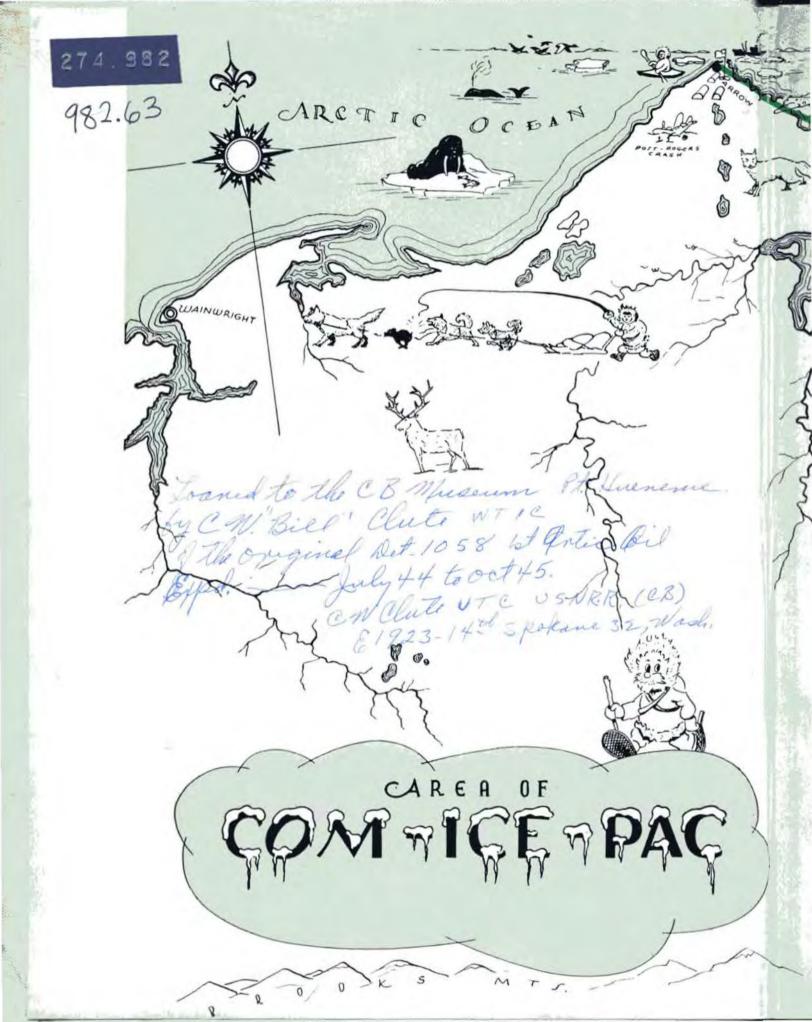
Malle Phil

REPORTS





- Wild and wide are my Borders, Stern as Death my Sway, And I wait for the Men who will Win Me- and I Will not Be Won in a Day---Robert Service 4 6 Co Co CAMP SIMPSON 99, ø BROWE a CAI P



Dedication

This book is dedicated to all men everywhere who have struggled against loneliness and the extremes of weather on the World's frontiers.

Foreword

The purpose of this book has been to tell the story of the Seabee Arctic Oil Expedition. It was designed primarily to cover just the first year's operation, but with the end of the war the Seabees were certain to be withdrawn and as a result the book has been extended to include names and a few pictures of those who would have been the second year group, and who in fact will have served several months before their work is finished. Mostly, however, it tells the story in pictures and words of what happened to the two hundred men and officers who set out in July 1944 to write a new chapter in the drama that is the search for oil.

The Staff

PRODUCTION OF THIS BOOK BY THE WELFARE AND RECREATION DEPARTMENT, NAVAL CONSTRUCTION BATTALION DETACHMENT 1058

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Painting of Lt. Comdr. W. H. Rex by "RUSTY" HEURLIN, Alaskan Artist

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The quotations from "The Complete Poems of Robert Service" with the permission of Dodd, Mead and Company, THE BEGINNING The cradle of Biblical history lies in the Tigris and Euphrates valleys. In the midst of this is the Garden of Eden, and in the Garden of Eden was the beginning of the Petroleum Industry. Eight thousand years ago pitch was used in this territory to bake bricks for building, to provide intense heat and was an integral part of that early economy. Noah hauled this black, quick-to-burn substance in crude boats and was an early "pitch peddler." From this early use of oil seepages in the original "Garden of Eden," oil has been one of the prizes of war and an increasingly essential product in the modern economy. These old Biblical areas are now undergoing intensive development by British. American and Russian oil interests. But the search for oil continues in the still farther corners of the earth's surface.

In 1924 William T. Foran served with and headed a U. S. Geological Survey doing geological work on the Alaskan Navy Petroleum Reserve No. 4 in the north and northwest part of that territory. Many oil seepages similar to those he was to view and work with in the Near East were apparent here. The native Alaskans hauled the black pitch on sleds drawn by dog teams over flat snow-covered wasteland, used it for fire and heat, different from the early Biblical stories only in mode of conveyance. In sight of many conditions comparable to that primitive society of the Euphrates area the work in the frozen North goes ahead today.

The war has created a need for tremendous additional reserves, and as a result Lt. Foran, now in the wartime service of his government, was sent to the reserve in 1944 and did additional work which was followed by a full scale undertaking a few months later. The government had decided that the Reserve should be tested. The Seabees, hardy, traditional "Can Do" men of the service, were given the assignment. These are the participants, and this is the record of their expedition

"Foran, William T., "Oil from the Garden of Eden," the Petroleum Engineer. Detoher, 1942.



VICE-ADMIRAL BEN MOREELL, CEC, U.S.N. Chief of the Bureau of Yards and Docks

Vice Admiral Ben Moreell

Best known to the American public as the organizer of the Navy Seabees, Vice Admiral Ben Moreell, Chief of the Bureau of Yards and Docks, has back of him approximately thirty years of sound construction and organizing experience.

In June of 1944 he was assigned a task somewhat foreign even to that vast experience which he had acquired—the organizing of an expedition to enter the Arctic and explore for oil.

The "Chief," as he is best known to his officers and men, attacked this problem with all the tools that he had acquired in working out other problems.

It may be said that the Chief of the Bureau of Yards and Docks has the ability to organize, deputize and supervise to a degree which is extraordinary. He selected his personnel, assigned them a job, and backed them throughout those months when it appeared at times as though everything would fall apart. Construction in the Arctic has now become another addition to the Chief's long list of experiences.

Ben Moreell was born at Salt Lake City, Utah, on 14 September 1892. At the Washington University, St. Louis, Missouri, he was both a track man and a fullback on the varsity team.

His engineering education completed, he entered the Navy in 1917 by way of a competitive examination and after a brief indoctrination course at the Naval Academy at Annapolis, he was assigned to the Public Works Office in the New York Navy Yard.

Vice Admiral Ben Moreell has been an inspiration to those who carried on the work in the Arctic. Now that the atomic bomb has settled matters for the Japs and the Scabees, it is with a feeling of satisfaction that most officers look back at their association with the man who has never hesitated to support them.

Captain Bart W. Gillespie

Captain Bart W. Gillespie, CEC, USNR, "Special Assistant to the Bureau of Yards and Docks for Petroleum Matters," was charged by his Chief, Vice Admiral Ben Moreell, with the responsibility for this expedition. A Californian, graduate of Stanford and veteran of World War I, Captain Gillespie qualifies for his assignment both as an engineer and oil man. His field experience in oil exploratory work includes California, Mexico, South America—and now—the Arctic. Commissioned by the Navy as a Lt. Commander early in 1942, he was sent to the Aleutians as the Officer-in-Charge of the 12th U.S. Naval Construction Battalion. There his command widened from the 12th Battalion to the Fourth Regiment, and later to the Sixth, in the meantime rising to the rank of Commander. Last May he won his promotion to a Captaincy. He is married and has two sons, one of whom has served with the combat engineers in Germany. His home is in San Gabriel, California.

As the planner and guiding force in this operation the results achieved in this Seabee Arctic Expedition stand as a monumental tribute to his efforts.



Lt. Comdr. W. H. Rex

The 'Skipper' of 1058 was Lt. Comdr. W. H. Rex, from ElDorado, Kansas. Having entered the Navy in December 1942, he was sent to the Aleutians in August 1943. Shortly thereafter he was made Executive Officer of the 66th Battalion. In June 1944, Captain Gillespie needed an experienced oil man for his toughest assignment. Lt. Comdr. Rex, then Lieutenant, was called in from the Aleutians and made Officer-in-Charge of the Expedition.

A graduate of the University of Missouri, he has been a geologist for a major oil company and for many years one of the best known and most successful independent oil operators in Kansas. The Arctic is tough, and the expedition needed rugged leadership. Without any reservation whatever, we had it. A Dutch mixture of sternness and unexcelled fairness, human to the core, made him a "Skipper" we wouldn't have traded for love or money. From the earliest and roughest stages of a storm-swept beachhead to the finding of oil sands near Umiat at "Wildcat Junction," Lt. Comdr. Rex has driven the Arctic project to a successful conclusion. He welded such diverse groups as Seabees. Geologists, Flyers, Geophysicists and various Army-Navy participating groups into a workable unit and the magnificent results obtained reflect his organizing and administrative ability. We are proud to have done the job under his leadership.





LT. ALBERT G. SMITH, CEC, U.S.N.R. Executive Officer

Lt. Smith was commissioned by the Navy in September, 1942 as a Lieutenant (jg), in the Civil Engineering Corps. He was in the South Pacific for fourteen months, participating in the Capture and Defense of Guadalcanal, and in the Consolidation of the Southern Solomons. Subsequently he served eight months in the Bureau of Yards and Docks, Washington, and was then made Executive Officer of the Seabee Arctic Expedition, relieving in January 1945, Lt. Roy S. Hitchcock, CEC, USNR, who had started out with the Detachment. Lt. Smith was an engineer and in heavy construction work before the war. Unmarried, his home is in Shelbyville, Tennessee. His genial manner and quiet efficiency softened many an Arctic obstacle. We were proud of our Executive Officer.



LT. WILLIAM T. FORAN, CEC, U.S.N.R. Chief Geologist

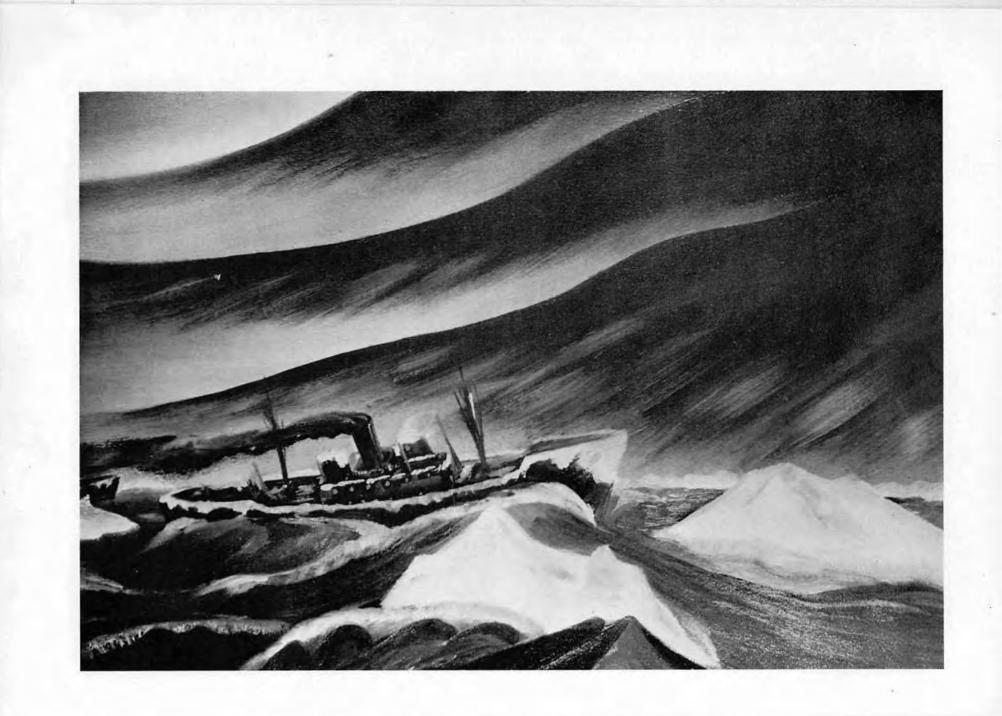
In 1924 William T. Foran made his first trip to Alaska, and undertook an expedition for the U.S. Geological Survey which now bears his name. Since that time he has taken leave from other work for six additional expeditions, each time filling in his knowledge of the geology of the North Alaskan slopes. In those early trips he noted oil seeps in this territory and spent many hours with the famed Charlie Brower, King of the Arctic, in discussing the locations and extent of those seeps. When the war emergency made the search for oil reserves on this continent a protective necessity, Lt. Foran lent his enthusiasm and knowledge of the Navy's long dormant Navy Petroleum Reserve No. 4 to those concerned.

Lt. Foran, Chief Geologist for the entire project, and veteran of Central and South America, and the Near East, as well as the fields of the United States, was with the Standard Oil of New Jersey from 1924 to 1941. The following two years he was with Filtrol of Los Angeles, and doing work for them in the Near East when war came to that area. A graduate of the University of Washington, with his home in San Diego, California, Lt. Foran is directing one of the greatest concentrated geological surveys in recent years. Traveler, lecturer, and author of several articles, his enthusiasm for the potentialities of this Far North area have been borne out to the fullest, by the first year's exploratory work.



CAPT. W. G. GREENMAN, U.S.N.

Capt. W. G. Greenman is the Director of the Navy Petroleum Reserves. He was a graduate of the Naval Academy in 1912, and now has served thirtyseven years in the Navy. Fifty-seven years of age, his home is in Arlington, Virginia.



The SEABEE ARCTICOIL EXPEDITION

The original authority for the expedition came from the late President Franklin D. Roosevelt. The sole object has been to determine whether an area, for twenty years classified as an oil reserve, actually contained oil in quantities. The entire expedition was approved, organized and loaded aboard ships in six weeks' time. The equipment was ordered, some of it made, boxed and shipped from all parts of the country by rail, truck, water and air to the loading port. This speed was necessary for the expedition had to establish itself in the six weeks the Arctic is open to shipping, or a year's delay would have been incurred.

Most organizations go through an initial training period and then have a group of officers move in and officially take over the battalion. This is done in an impressive and picture-recorded ceremony at which time the battalion colors are rendered and a battalion is born. Not so, N.C.B.D. 1058. Nothing so glamorous happened to us. Like "Topsy," we "just growed." And so from rather obscure beginnings a group of 200 men and officers screened and carefully selected from an outfit originally intended for the reconstruction of the New Guinea oil fields, were entrained for the West Coast, vaguely aware of themselves as a special expeditionary force to be engaged in oil exploratory work 400 miles above the Arctic Circle. The outfit picked up stragglers as it rolled across the continent, paused briefly in Tacoma, Washington, and "acquired" its Commanding Officer, Lt. Comdr. W. H. Rex, just in time to get on the same ships together and start the northward trek. Unlike most departing units this one knew where it was going, but as with most, it had no idea what was in store for it. Our enemy, we knew, would be the elements, but no one knew what the elements were like. We felt uncertain, we were expectant, a bit awed by the possibilities. But as we wended our way northward, beyond the Aleutians then into the Bering Sea, up through the straits that separate the two greatest powers on earth and into the ice fields of the Arctic Ocean we stayed our fears as we remembered with pride that this was in fact an exploratory expedition, calculated to overcome every obstacle it met, with personnel selected accordingly. And so-we waited eagerly, albeit a little apprehensively, for what lay ahead.

"Naval Construction Battalion Detachment 1058, personnel and cargo, departed the Port of Tacoma, Washington, 20 July 1944, aboard the U.S.S. Spica and the S.S. Jonathan Harrington, arriving at Barrow, Alaska, 4 August 1944." Thus was the laconic report which announced our arrival.

Preferring to establish a camp near Cape Simpson, about 75 miles east of Point Barrow, we scouted this area for several days, sending landing parties ashore, taking soundings and considering possible camp sites. Heavy ice was encountered and the ships maneuvered very cautiously. Ice pilots, Capt. S. C. Lystad, veteran Antarctic explorer, on the Spica, and Lt. Comdr. John Backland of the Harrington, aided by a PBY for ice observation, carefully calculated every move for the ships' captains. All parties agreed on the impossibility of landing and erecting camp in that area. The land was low, only a few feet above the ocean, and dotted with lakes and covered with swampy tundra. Poor drainage prevailed, landing strips would have been impossible in the summer and the unloading itself, a near physical impossibility. Consequently the ships returned to "The Point" where two beaches were soon under consideration. The number one beach at the most extreme point of Northern Alaska served to receive 80% of our cargo. The Seabees went ashore across the farthest northern projection of the country's northern-most territory. The number two beach, much preferred, received but 20% of the cargo, and is immediately adjacent to the present camp, which is only a few yards from the only fresh water lake in this entire area.

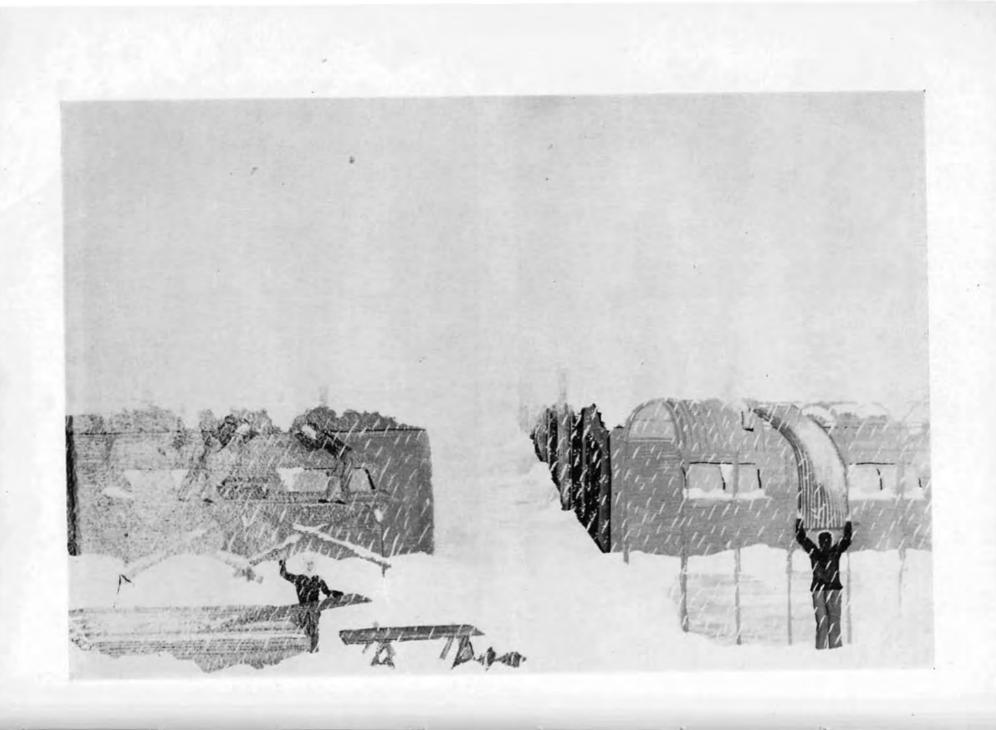
From August 12th to August 24th, the feverish discharging of cargo continued. The ships were forced to stand off shore from two to four miles and all the cargo was hauled by barge and LCM. To say we "stormed" ashore, is fact rather than fancy, for 35 knot winds and resultant high seas made the establishing of a beachhead a nightmare. On one occasion alone, not only was considerable cargo lost but 32 men were submerged in the Arctic waters. Innumerable instances of heroism went unheralded but the fact that so many men were in the icy and ice-filled water without the loss of life is mute testimony to the quick thinking and quick acting men who shared the experience. On numerous occasions the ships found it necessary to change their positions, to dart around the "Point" one way or the other in order to avoid the ice flow. The Harrington eventually ran aground, but was soon freed. Floating ice consistently harried the discharging operations. On many occasions an LCM would run into, and push floating ice away from the ships so that other barges could go ahead with the work. Young coxwains found themselves dodging ice for the first time in their lives and in several instances in late August, with heavy fog enveloping the operations, and magnetic compasses spinning like tops because of indefinite electrical and magnetic phenomena, they headed for the open Arctic only to be retrieved by another LCM which sensed their difficulty, or by a glimpse of light or the sound of the foghorn from the ships, Shattered barges and wrecked cargo were strung over twenty miles of the North Alaskan coast and cargo was drifting up on the beaches for weeks. At one time eight miles of shoreline were covered with barrels of fuel, that were lying almost end to end. Most were salvaged hurriedly, but as late as February, after the Arctic had long been frozen, a sled train-going along the coast salvaged a nearly full barge of lumber, drill pipe and miscellaneous cargo. At one time every barge and landing craft we had was floundering badly in the Arctic tempest. In some instances D-8's, with long cables, were used to ground barges; and operators were prepared to jump when their powerful "cats" seemed certain to be drawn into the sea by the waves lashing the barges about as if they were rubber balls.

Having at last gotten ashore, we could see only jumbled piles of boxes and barrels on our narrow sand split-but we braced each other with, "Well-by God, we made it !"





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CAMP BUILDING ... and ... MAINTENANCE



LT. (JG) L. S. MADES, CEC, U.S.N.R. Construction Officer

Within a few days of the time we started discharging cargo a handful of men under Lt. (jg) Lloyd S. Mades and CCM Joe Broom, both of Oklahoma City, started erecting our temporary living quarters. Sixteen by sixteen tents were to be our homes for a month, and a large temporary mess hall was hurriedly established. The Eskimos saw these and ruefully predicted that one half of the Seabees would freeze before the winter was gone. Another old Native said "the big Seabee would bury the little ones, and then the Eskimos would bury the big Seabee." And you could have fooled us. But we had quonset huts, not yet uncrated, which were to be our permanent quarters and the natives had not yet seen them. Frankly we were a little harried by the talk of subzero weather. But this only served to make everyone work harder, and as a result, the two camps, the temporary and permanent, were built in thirty-three days with only a limited number of men. Others were trying to secure supplies before they froze or were covered up with snow. Carpenters Kennelly, Mills, Lindsey, Gamez, Howe, King, Carlson and Biggs were flailing away for all they were worth. "Pancho," from Eagle Pass, Texas, thought this was a fairly cold country and he worked as if he were going to do all he could about it. One sight and sound we'll always remember is "Pancho" on top of a quonset, snow and wind swirling about him, encouraging a group with epithets thrown at them in three languages, with enough accent to make it all funny. He sang, too, under certain conditions.

Our camp was perhaps like thousands of others. The great difference was though, that we had a time limit, the Arctic winter, driving the men on to their fullest efforts. Everyone turned carpenter, from architectural engineer to oil well drillers and derrick hands. Driving big nails into tin quonsets is a thumb-ruining process, and the accuracy of all but our regular carpenters was a thing about which the less said the better. But the speed with which warm and very adequate permanent quarters were provided stopped the natives cold. They had no conception of such possibilities. Suddenly, in four weeks' time, a city larger than they had ever seen was established on their Northern Coast, and they admired that type of ability.

One thrill will be especially remembered. When our quonsets were being put up it was discovered that they had screen bulkheads, for tropical use. Aside from the momentary shock it made little difference, for the camp construction department remedied the shortcoming in a hurry. It took much more labor, but proved to be not serious.

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Very soon we had a complete hospital, galley, powerhouse, garage, administration building, recreation hut, and several warehouses, in addition to our living quarters, which, after further insulating, served us perfectly through the plenty cold days ahead.

The things we remembered about the camp building days were the excitement in getting it built fast enough, sore hands, from pounding nails through corrugated tin in freezing weather; and the cursing and shouting which showed our bravado and hid our fears.

Camp maintenance work became routine later on, but climbing telephone poles at twenty-five below zero, by Chief Babbitt and his cohorts, was no cinch. In the first place it took a jack-hammer to dig the holes through, or at least into the ice, and then a barrel had to be at the top to pack the loose sand tightly enough, the latter overlaying the permanent ice. Our one short water line to the galley had to be heavily insulated, and for the camp as a whole we hauled water in pontoon sections after pumping it from the bottom of a frozen lake—hauled it every single day all year long. Bogle and Barnhill held down this job most of the time, and they had to install a stove next to the pontoon which was enclosed by plywood on a sled. This was done to keep the water from freezing in the half-mile haul which was made. Electricians Maurice, Hobel, Milliren, Hammond, and Richardson, along with plumbers and shipfitters such as McAllister, Gautschi, Roberson, Dailey, DeFilippis, and Gebert all did a thorough-going man-sized job in conquering the tough Arctic weather.

The inland camps were established primarily by this department, with three or four men accompanying the Construction Officer to the proposed sites and starting up house-keeping at fifty below—but that is another story.



Back Row, left to right—MCALLISTER, BABBITT, BROOM, MILLS, KENNELLY. Front Row, left to right—OGLE (president A'aska Builders and Muster Association), MAURICE, GAMEZ, CARLSON.



Left to right-SAMMONS, SOISSON, BIRDWELL, PIESTER, WEBB, OGLE, SPOHN, McGEE, KING and HOWE.

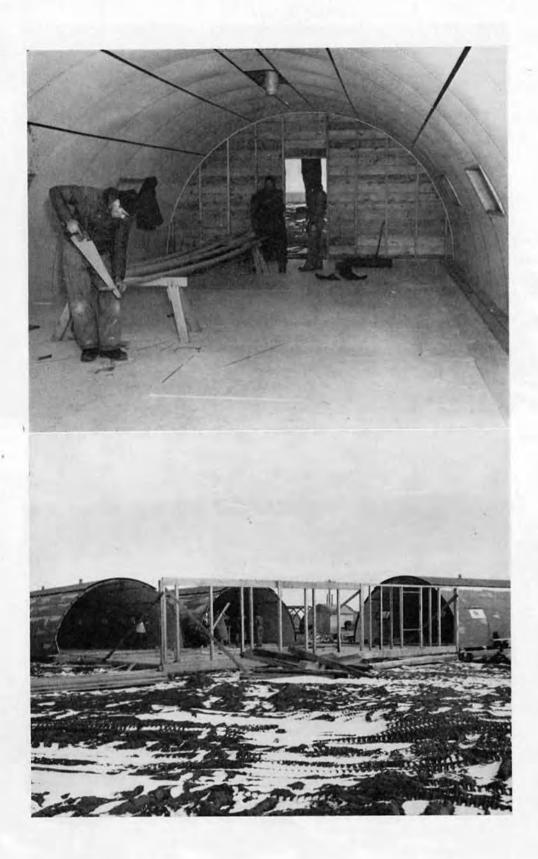


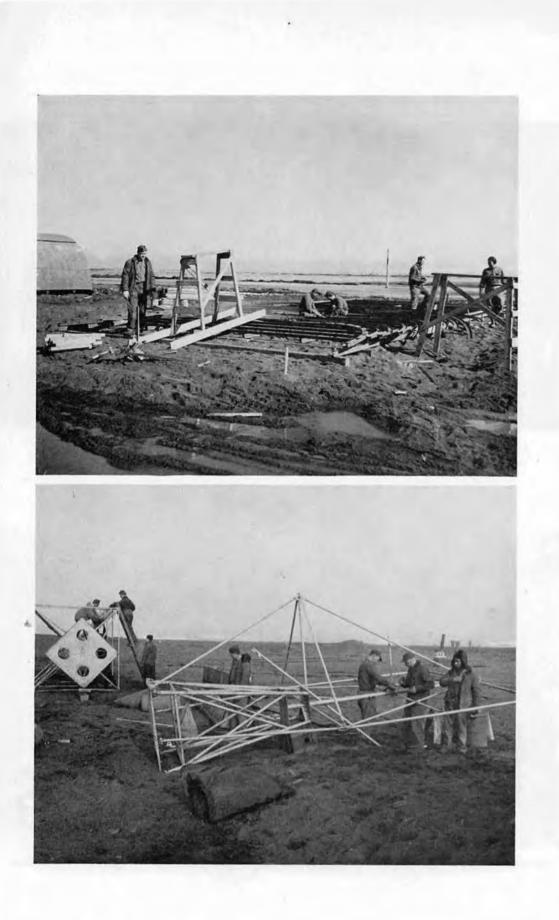




Top, left to right—LT. (JG) MADES, WALKER, DOW, LEATHERWOOD, TRUEBLOOD, REED, ROUNDTREE, HUSTEAD, KOLB, ECCLESTON.

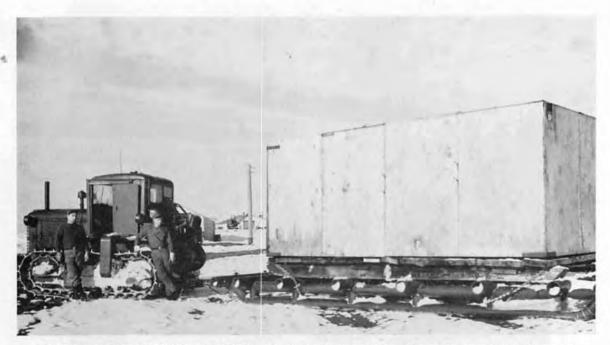
Bottom-Our chow hall under construction.







Left to right-Maintenance Men MILLIREN, DAILEY, GAUTSCHI, HAMMOND and GEBERT.



Maintenance Men BARNHILL and BOGLE, whose job it was to keep the camp supplied with water.



Stove maintenance man, A. C. DEFILIPPIS, who was responsible for keeping us warm in the Arctic.



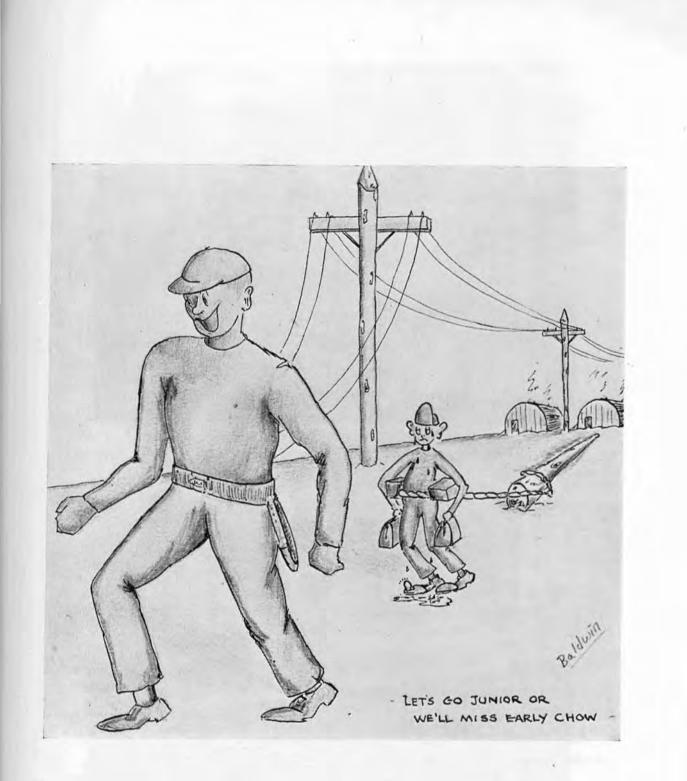
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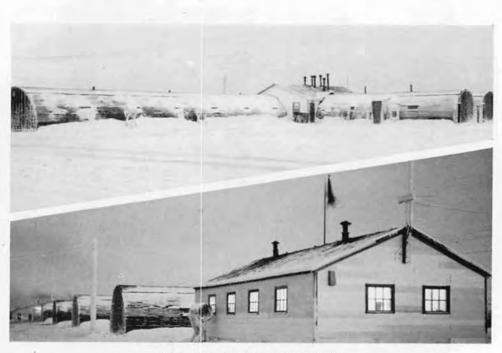
Maintenance Men HOLT, PIESTER, STOVER and RODRIQUEZ.



Electricians MAURICE, RICHARDSON, BABBITT and MILLIREN.







Top-Our galley and mess hall. Bottom-The Administration Building, taken at noon on a winter day.



Top-A shot of our main camp.

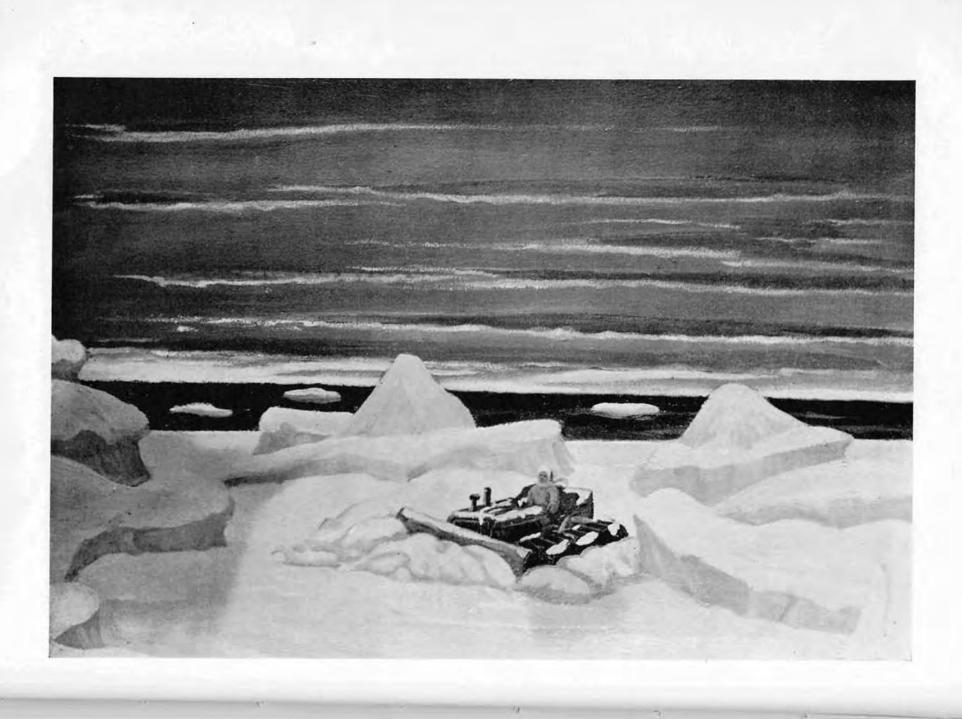
Bottom-Our skyline.







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LT. (JG) JIM CONNELLY Transportation and Heavy Equipment Officer

Under the leadership of Lt. (jg) James F. Connelly, of Oklahoma City, Heavy Equipment and Transportation had its hands full in this north country. With the element of "Weather" and sub-zero temperatures to accentuate all ordinary problems this department was harassed all winter long. In addition to using our limited equipment to facilitate the unloading operations in 1944, all the grading for construction had to be done in a very few days before the ground was to freeze as hard as cement. But before this was finished an airstrip had to be built in order that we might receive the air support necessary for the expedition to function properly. Turning to this task with a vengeance, the strip was finished in short order. With nothing but sand on which to make a landing field, it was difficult to find adequate stabilization for it. The only available substance was a little sparce tundra, so mixing about thirty per cent tundra with the pea-sized gravel a base was provided which permitted DC3's to land even before the freeze-up. To complete the cross strip, eighteen inches of solid ice was cut away from the last eighteen hundred feet. Only a thin layer of tundra overlays the permanent ice, and it varies from a few inches to a very few feet.

HEAVY

EQUIPMENT

Throughout the winter, motors, once started during the day, were almost never stopped. Heaters were used on the motors to get them started and the grease guns had to be constantly heated to keep them working. Chiefs Fletcher, Johns, Partlow, Holly and Roderick guided the heavy equipment fortunes and they all did a commendable job. A. L. Schmidt was one of the hardest working grease monkeys in the world, and his early work was a lifesaver in keeping the equipment moving. Later, such men as Burleson, Linn, Hamilton, Murphy, Elkin, Ward, Olson, Labor, Edmundson, McFarlane, Tanguy, Leatherwood, Baker, Cole, Le Doux and Pennington — along with many others — did a tremendous job, and deserve worlds of credit for making the impossible come true time and again with equipment that was over-used and ridden by the worst weather imaginable.

Innumerable jobs all year long relative to the entire project were handled with speed and ability by the men of this group. More than any other project, however, they pointed themselves and their efforts toward the greatest sled freighting operation ever undertaken. This operation, which turned out a credit to the entire 1058 organization, and of which every man is proud, was guided by the head of this department, and driven to successful completion by the type of Seabee ingenuity and guts which have characterized the widely sung exploits of the World War II Seabee Organization. To a department which fought its way every inch, which thrived on trouble and difficulties, we all take off our hats.



Back Row, left to right—WARD, LEATHERWOOD, LINN, MURPHY, ELKIN, BIGGS and BARNHILL. Bottom Row, left to right—HARGROVE, HOLT, HAMILTON, OLSON and CHIEF HOLLY.

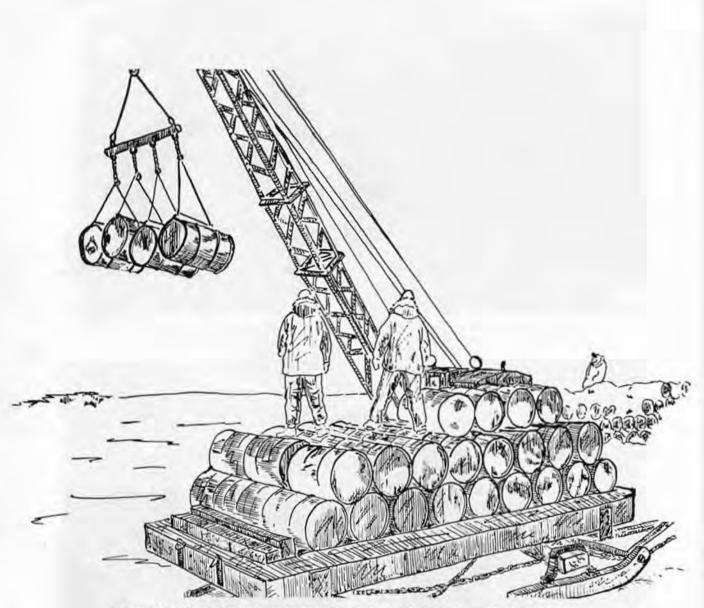


Left to right—Skinner, Labor, Edmundson. Kneeling—Pennington, Partlow, Le Doux, McFarlane, Linn.



This picture typifies the hazards of heavy equipment operations in the Arctic.





LT. (JE) R. G. BALDWIN'S conception of loading sleds prior to an Arctic train trip.









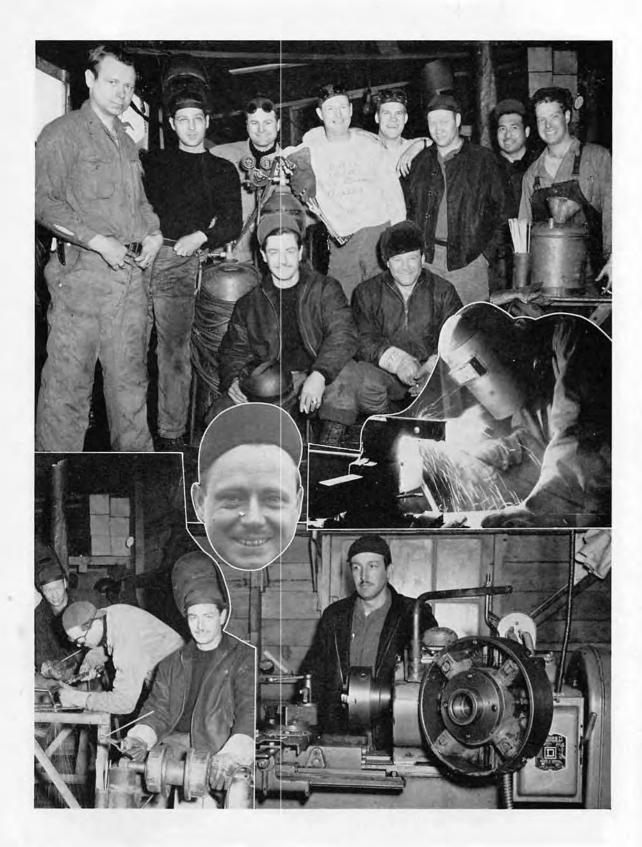
SHOP SECTION



Proprietors of "Ye Olde Blacksmithe Shoppe," O. H. ECCLESTON and W. W. TAYLOR.

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On the following page are several shots of the welding crew and machinist, J. P. SKINNER, lower right. Welding crew, upper, are, back row, left to right—KINCH, KIRBY, McFARLANE, HENDRICKSEN, JENSEN, SCHATTENBURG, MURPHY and BLACKISTON. Kneeling—LE DOUX and STOVER.



SLED TRAIN

"We deliver the freight, regardless of weather, supplies, communications, or personal hardships." So ran the slogan of the world's northernmost freighting company. It consisted of a small but hardy group of Seabees banded together for the purpose of transporting supplies and materials to Umiat on the Colville, close to the proposed drilling site, and to provide equipment and material for geological parties in the Cape Simpson area who were on specialized assignments. To get the needed materials to these areas it was necessary to freight hundreds of tons of equipment over thousands of miles of frozen Arctic wastelands; to travel on the Arctic Ocean itself, in huge sled trains; to cross inlets with high banks and pressure ice cracks, which might be many feet in width, and through which an entire train could conceivably fall; to wind up rivers and cross lakes with drifts and sand bars alternating as obstacles. To top it off, even rougher terrain was found at trail's end where steep grades had to be conquered by the comparatively unwieldy sled trains.

Eight such freighting trips were made from the base camp, all from 22 January 1945, when the lakes, rivers and ocean were frozen to a safe depth, until 3 June 1945, extending over a period of about four and one half months. Five trips were made to the Cape Simpson area and three to Umiat on the Colville. The first long trip to Umiat was completed on 12 March, after 18 days and 331 miles of the worst the Arctic could give out.

We provided and were provided with the most complete and well equipped sled train ever to move across country. Sleds were built of the only thing available-heavy oil well casing, and these pipe sleds were to carry half the tonnage which was freighted. All welded jobs, seven and eight men under Chuck Kinch were busy for weeks on end preparing them for the long trek. Additional sleds were flown in, and on 22 January the first trip got under way to Simpson. For four and one half months our main concern was the progress of the freighting operations. With wanigans built to house men, galley, radio, and repair shop, and four D-8's to do the work, over 2500 miles were covered by this slow, tedious process, and done in temperatures ranging from near 50° below to 35° above, and from total darkness to twenty-hour daylight. These "Tundra Trains" covered at the rate of two and three miles an hour a distance equivalent to a plane hop from New York to San Francisco, but over terrain which threatened to create an even trickier Gremlin psychology than ever haunted our combat fliers. It deserves to be told in fuller terms but with pictures and a few suggestions of difficulties and humor the final story will be for the individuals to tell. There is no need to exaggerate-the truth is unbelievable enough in the Arctic.

To travel along the Arctic Ocean in the blackness of the Arctic night is in itself fantastic and almost unreal. Then to cut across inlets with huge pressure cracks seemingly on ever side—and always capable of swallowing sled or train, and to lose your way across this inlet 13 times in 13 crossings—gives an idea of the first sixty miles of the trip. From there the train went down rivers frozen solid, and which curl and wind across the Arctic in grotesque fashion, and which have so many tributaries that every



Standing, left to right-Roderick, Johnson, Pursell, Eccleston, Kincaid, Rivers, Nichols, Kenrick, Sisk, Kline, Haus. Kneeling, left to right-Thatcher, Dixon, Elliott, Mencke, Sparks, W.O. Delaney, Pennington, Lt. (JG) Connelly, Berrier, Olson, Le Doux.

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trip is an adventure in navigation. Snow often piles high in the channels of these rivers, but the next obstacle may be a bare sand bar which defies all but the last ounce of power from the winch lines. To get out of a river bed once in it is no small feat, and to cross a lake with banks invisible due to drifting snow poses a major snow moving and engineering job. Grades as great as twenty per cent were traversed with "Cats" on both ends of a section in order to prevent a smash-up. Three D-8's often lined up and hauled one "four-sled train" up a steep grade, and usually after such a pull the wanigan and sled bolts would have to be tightened and the loads adjusted and made secure. Big three inch steel pins were pulled in half, and every imaginable physical and mechanical difficulty was encountered. The front D-8 dozed most of the snow and the others followed rather handily, but your trail was almost never visible on the next trip. Seven bottom rollers were replaced on one cat, with a man lying under it eight to ten hours, and at forty below. Working on solid ice, in order to avoid losing tools and parts in snow during one such job, Tex Berrier, MM1c, of Lyford, Texas, won the admiration of everyone who worked with him. Motors were killed on the cats only once in 24 hours-to grease fans-and then for only fifteen minutes, or heat would have to be placed on them. Prestone froze solid inside the shop wanigan, and it freezes at about 35° below. Flashlights could be used but a short time, for the batteries would freeze. And one of the most common sights was the blowtorch, or Seabee flamethrower, which was used to warm up everything from grease to motors to hands.

Throughout all these operations there was nearly constant radio communication with the home base. R. L. Haus, RM1c, fought his own battle of the air during these trips and though he was talking to himself and to the snowbirds by the time he got back his mission was most certainly accomplished in every detail. Air support was not lacking either. Sig Wien hovered over the train when weather permitted noting possible shortcuts, getting them headed the right way after a blizzard and bringing them mail and emergency supplies. On one occasion mail was received on the train in six days' time from Texas. This meant going through Fleet Post Office, San Francisco, to Seattle, to Fairbanks, Barrow and then by further shuttle to the Cross Country Sled Trains. The rule, however, was no mail—though it was successfully delivered to them on several occasions.

Sleeping on these trips was difficult. Men got the equivalent of seasickness— Tundra Terror, we called it—and Herb Kendrick, a cook, threatened to ask for shore duty. After a few days of particularly bad riding one man awakened on a cold morning with, "Christ, what a night. I rolled and bounced and didn't sleep a wink!" It so happened that because of a terrific storm the train hadn't moved a foot in twelve hours, but it suggests that the wear and tear stuck with a man and hampered even the few hours' sleep which could be stolen. One wanigan had an inside "head," but you might be a long way from that section of the train, and it was no simple matter to perform the normal functions at fifty below and a wind blowing. In fact it was hardly worth it.

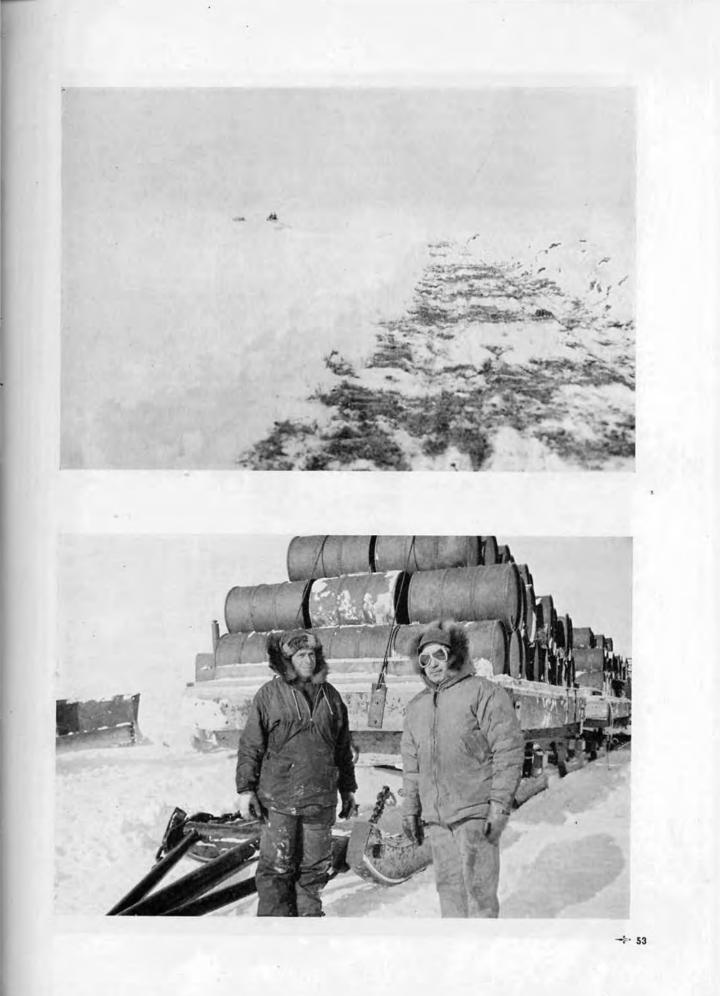
What often proved to be an exasperating task was the comparatively simple one of eating. Warm meals were served in the galley wanigan, but men have been known to reach for hot cakes and have their hand fall in hot syrup. Men have had soup and hash fall in their lap with every jerk of the train, and cooks have had an entire batter of hot cakes hit the middle of the deck and splash from one bulkhead to the other. On another occasion, with ice cream coming up as a special treat on a not too severely cold day, a corpsman, T. E. Vanderford, missed a step and ended up with his face in it in true slapstick comedy style. But the food was good, and the men averaged eating four pounds of meat per day for each of them, and they averaged a gallon of coffee a day per man. Though not dependent on it for food, their supply was occasionally supplemented by caribou, which were killed when the creatures attacked the sled train, andof course-had to be shot in self defense.

Few have ever traveled the route this freighting operation covered. Only two native families dot the entire area, and not over one or two white men have ever followed this route. Long hard nights were the ordinary thing. Fifty below zero, bare hands fighting grease guns frozen up, snow belly deep, darkness, bad sleeping—these difficulties were softened only by the rare beauty of the Northern Lights as they shown in all their splendor. It was an odd mixture. Seabee admiration for the majesty of the electrical phenomenon was often, "I'm a son-of-a-bitch if that isn't a sight!" Sheer beauty, but rugged.

Ten men made all of the cat train trips. Lt. (jg) Jim Connelly, Tex Berrier, John Thatcher, Frank Olson, Dick Johnson, Damon Pursell, Chief Roderick, and R. L. Haus. Alaskan Scouts Sparks and Mencke also made each of the trips. Other men who made most of the trips included Eccleston, Scholz, Dixon, Schattenberg, Grunigen, Pennington, Nichols, Kenrick, Kline, W.O. Ralph Delaney, C.W.O. Wesley Burgess and Lt. Jim Hugg. The latter, from Groesbeck, Texas, was the navigator on the trips. He was supplied with books on astronomy, with compasses of every description—for checking and double checking, and a keen sense of humor. It was probably the latter which worked best, for they got lost so many times the Snow Weasel, a wierd tracked vehicle which was used for scouting, was finally tied on behind and dragged the rest of the way. Other men who made one or more trips included Dr. L. Schoenleber, Cole, Le Doux, Sisk, Elliott, Ross, Rivers, Vanderford, Kincaid, Lewis, Schwind, Bakevich, Holley, Kinch and Chief Photographer Morris B. Jondall.

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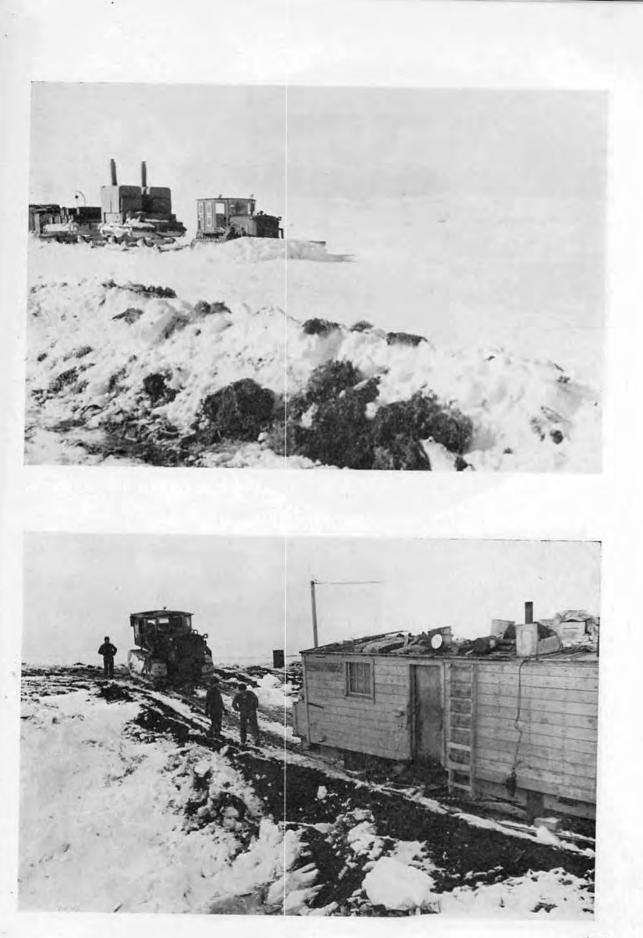


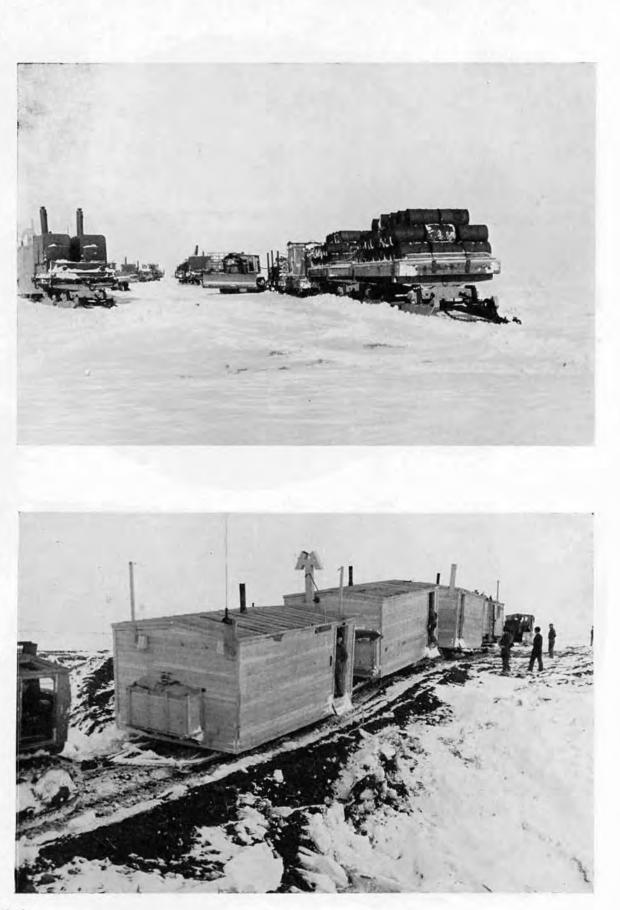


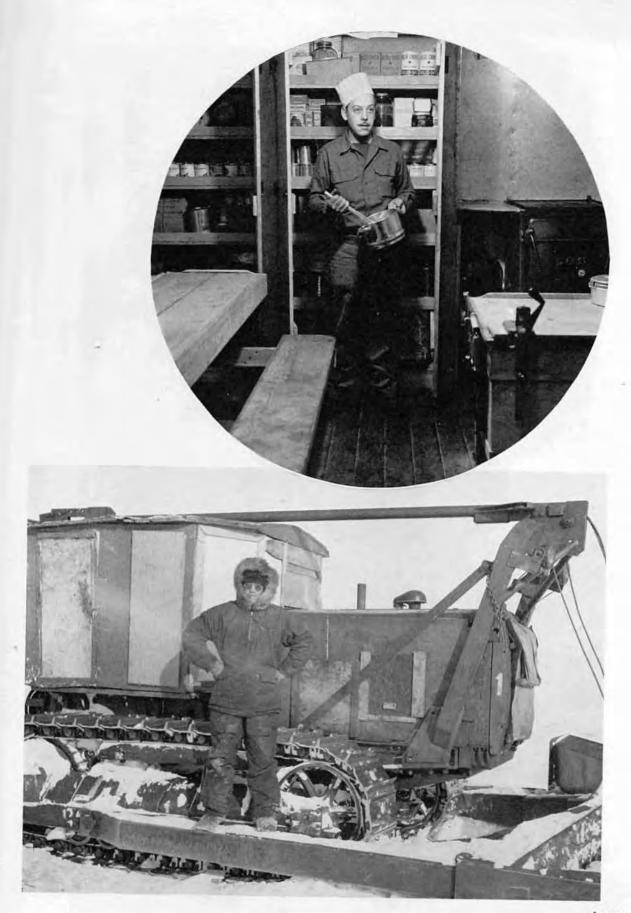












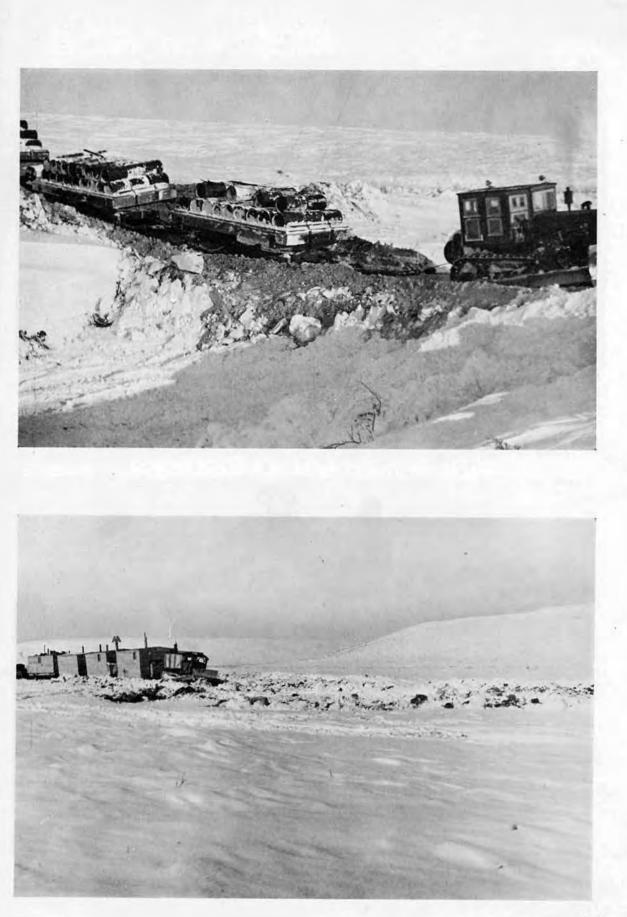


Typical of the terrain encountered on the trans-Arctic train trip. Notice the pressure crack in the ice (center).



To make water for the train crew, it was necessary to melt ice, as demonstrated here by KINCAID and KLINE.







Top, left to right—COLE and ROSS. Standing, left to right—RODERICK, MCFARLANE, SCHOLZ, ECCLESTON, SCHATTENBERG, OLSON, DIXON, JOHNSON, BERRIER and THATCHER. Even this heavy gear didn't assure warmth.

SUPPLY DEPARTMENT



LT. (JG) R. G. BALDWIN Supply Officer

SUPPLY

The work of the Supply Department proved to be an extensive and difficult task in the Arctic. They had the usual problems of weather and transportation, but many of the demands made on them were quite unpredictable because of the experimental nature of our work. Having worked on the requirements for the year's operations, Lt. (jg) Richard G. Baldwin was well aware of the many problems involved, but even such an awareness could not always cope with losses incurred in landing operations and through snow and sand burying crucial items before they could be secured. The work was closely akin to a regimental supply problem, rather than a detachment or battalion. There was no close source where supplies could be obtained, no general "larder" on which to draw. Fairbanks and the Army at Ladd Field, 500 miles away and beyond the imposing Brooks Range, constituted our closest link. Usually supplies of every description had to come all the way from the States with the ever present "urgent" attached.

But for all the difficulties of weather extremes and limited resources, Supply met the many unique and varied orders and requests with real adequacy. The very nature of our activity, requiring sleds, sled parts, cat rollers and parts, weasels, oil drilling equipment—and the myriad ordinary requisitions—meant that the scope of Supply's operations were of such magnitude that they deserve the highest recognition we can accord a department. Chief Jack Rives and C. P. Mangold, SK1c, kept the field operations humming in a dozen different directions and we are proud of their accomplishments.



"Suppliers and Disbursers," left to right-PIPER, HARRISON, ESTER, BERES.



Supply men, left to right—CHIEF RIVES, BURNEY, LANDRY, and seated—MAY and HARMON. Not included are: MANGOLD, THOMPSON, HOFFMAN and MANSFIELD.





The old and new ship's store.

COMMISSARY

Chief Charlie Pinson, under Lieutenant (jg) Baldwin fought the perennial chow problem with all the skill and ingenuity he could muster. He served mutton to the glee of the sheepherders and to the cat-calls of the Texas cattle hands. He served thin steaks to the bewildered meat eaters of the Middle West, and an occasional thick steak to the unbelieving and unknowing Californians. At least 50 per cent liked each meal though, and "Panama" Charlie absorbed the variously acquired pent-up steam of the other half with comparatively little strain.

Cooks Joe Wallen, Dick Christian, Herb Kenrick, J. V. "Whitey" Chaplik, Nick "The Last Greek in Captivity" Lewis, Orvel E. Kline and Frank E. Schwind all did an excellent job from galley to sled train to field parties, and are to be congratulated for their work. The bakers were our pride and joy too. Carl Morgan, Eddie Wiget and "Chris" Christopherson saved many a short ration with consistently good baking and their many delicacies were strictly first class.



Members of 1058's Commissary Department, left to right—WALLEN, CHIEF PINSON, CHAPLIK, SCHWIND, CHRISTIAN, WIGET, KENRICK, KLINE, MORGAN, LEWIS. Not shown is CHRISTOPHERSON.



"Hittin' the Line"



"Chicken-in-the-ruff, a la Arctic"



DISBURSING

ENS. DON BENNETT Disbursing Officer

Just as though Supply, Galley, Ship's Store, and Laundry were not enough, Lieutenant (jg) Baldwin had Disbursing for the greater part of the year. In the office though, was George Piper, SKD1c, who could assume most of this work and much of the responsibility involved. Hard working, genial, and extremely capable he was invaluable to the department throughout the year. A new Disbursing Officer, Ensign Don Bennett, arrived in late April, 1945, and took over those duties. Also known as a foot-racer of sorts, he was a valuable addition to the detachment. Bill Beres, CM3c, did a tremendous job in Supply and Disbursing Office work and other men such as M. M. Harmon, Louis E. Landry, Zolen W. Burney, Perry A. Cooper, Chief J. M. Thompson, J. V. Harrison and Jack Ester all contributed a full share to their part-year duties with this department.



LAUNDRY

Lest We Forget—Leckie's Laundry—an establishment which shrunk more clothes in less time than all other laundries in the entire world. The wherewithal was lacking, we now recognize, but we didn't admit our awareness of difficulties at the time. We just moaned and groaned as new woolens would come back fit for our children's Christmas clothes, shrunk from 44 to 22 in one fell swoop. The genial doctor of the woolens morgue was a winter's stand-by though, and he did an excellent job of managing the world's farthest north laundry.



The "Sure-Shrink Laundry." REED, left, and LECKIE, right.





LT. (JG) H. C. GILLEN Waterfront Officer

MARINE DIVISION

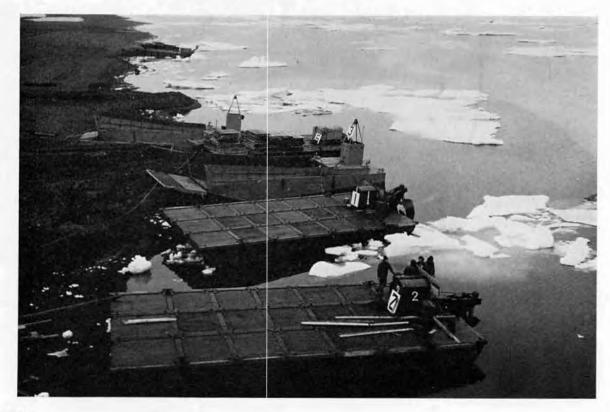
With only about six weeks' open season for shipping, the Marine Division under Lt. (jg) H. C. Gillen, had most of its work shoved into this very brief period. With Chief Harry Zimmerman and A. I. Ross, SF1c, heading up the work, pontoons were assembled upon our arrival in 1944 and the 5 LCM's were kept in working order. The greatest difficulty was combatting the floating ice. After a season's operations the barges and LCM's were so badly bent and pierced that it was a long job to make them again seaworthy. "The Fleet" was high and dry for the winter in Elson Lagoon. Particular care was had to keep the equipment from deteriorating over the rugged winter.

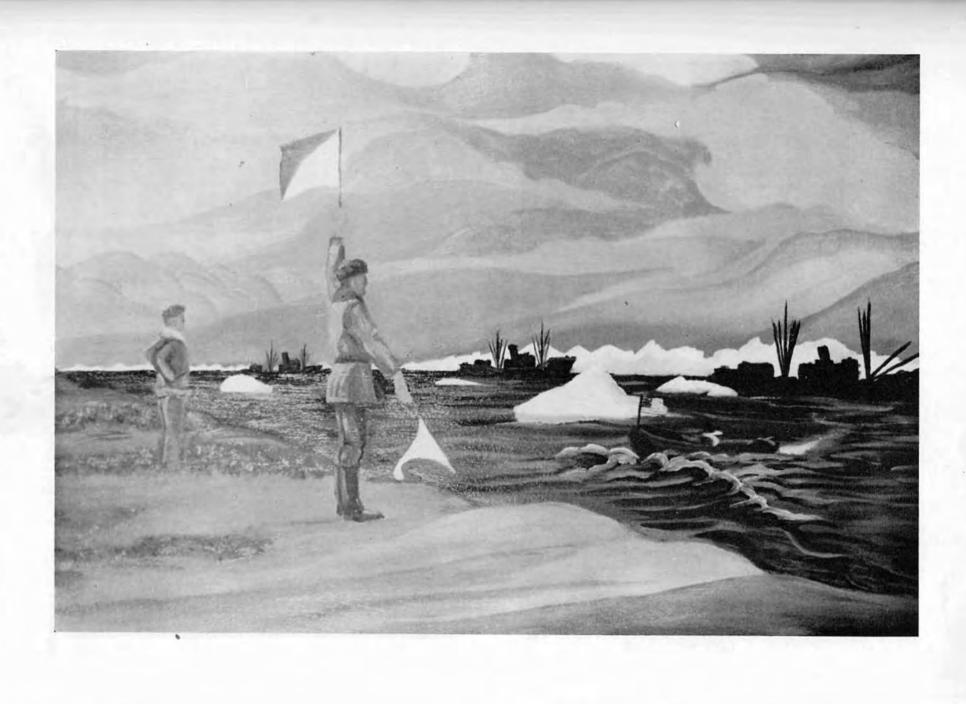
In 1945, the discharging operations went off perfectly. It was quite a contrast to high seas, battering ice, and spinning compasses which made it tough the first season. Lieutenant (jg) Gillen had additional duties of Personnel Officer and served as temporary Executive Officer on two occasions. Chief Zimmerman hails from Cleveland, Ohio, while Ross speaks longingly of Southern California. The latter has a constant grin which the Arctic failed to erase—but frankly, it looked a little haggard a time or two.

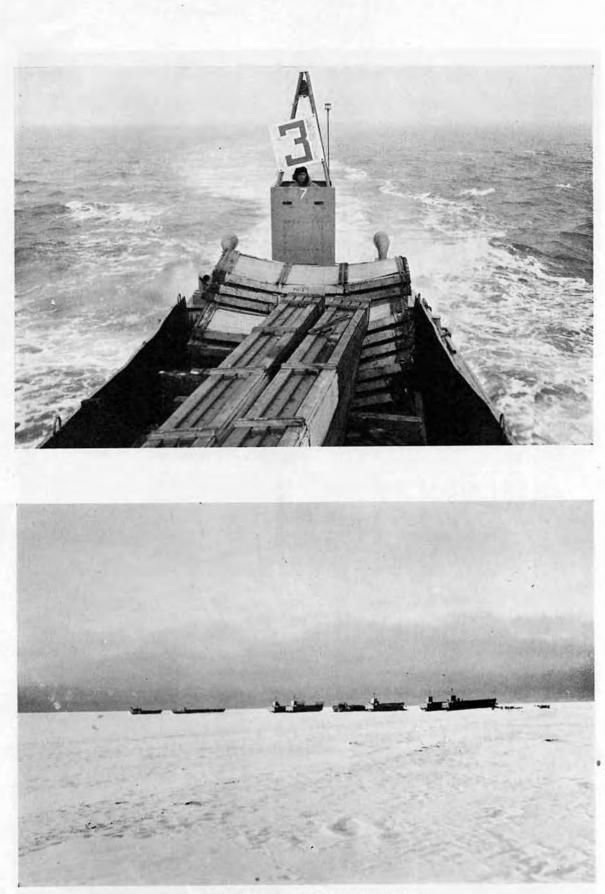
It is a rare operation for a Marine Division to fight the conditions of ice, high seas, and magnetic disturbances which frustrate compass use. We think all those connected with this phase of our work did an excellent job.



Marine Division Personnel: A. I. Ross, SF1c, and CHIEF HARRY W. ZIMMERMAN.







LCM's and barges at their winter drydock.

ENGINEERING DEPARTMENT



W.O. RALPH W. DELANEY Engineering Officer

The Engineering Department was organized and directed by W.O. Ralph Delaney. Its work consisted of surveying camp sites and airports, drawing plans of the various camps, keeping up with the many revisions and laying the groundwork for further development of our facilities. C.C.M. Gordon L. Rush, Neil Grunigen, Prescott Reed, H. L. Longest, R. Lynch, along with Chiefs Walker, Gaartz, Gitchell and Lyng made up the personnel. Later J. A. Mahoney was added.

In addition to their expected work these men had the faculty of winning some odd jobs contracts which enhanced their program. A demountable house for the big rig was dreamed up and occupied their inventive minds for weeks on end. They also measured the thickness of the ice in the fresh water lake as well as in the ocean. Since it was five feet thick, and a hole 3 feet by 8 feet had to be chopped, it turned out to be quite a contract. Also, Mr. Delaney and Grunigen served as navigators on some of the sled trips, both having been on the Colville the previous summer as part of a preliminary geological survey party.

When surveying was done throughout the winter, stakes were set in the ground by pouring water around them and letting it freeze. This took only a very few minutes with the temperature often at 40° below.

We accused the Engineers of designing our quonsets with gutters on the inside, for it was clearly established that moisture does condense inside these huts. Another interesting feature in their work was the possession of a solar blueprint machine, rather inactivated by the long dark days and nights. Additional problems included a place to work. At first an entire hut was theirs. Soon, however, the Army moved in a radio station, taking about one half the room. In February the Navy Weather bureau moved in—and as this is being written the Engineering Department is in one small corner of Hut No. 12 fighting tooth and toenail to stay in the building. The reason, of course, is that its job is about finished—and certainly a "Well Done" crowns their work.



Engineering Department: left to right—MAHONEY, WALKER, BRITT, LARSON, REED, HEIRGOOD, MARSALIS, GRUNIGEN, SPRIGGS, W.O. DELANEY, RUSH, LONGEST.



GRUNIGEN and RUSH test the depth of the ice.

PERSONNEL

This department, like most of the original draft for 1058, was sired by BuPers out of the now defunct 3050. When Lt. (jg) R. G. Baldwin went to Ensign Duguid, the Personnel Officer of 3050, and requested the services of two yeomen to work in personnel in 1058 he cannily gave him the two men he could spare with the least damage to his own staff, and J. S. Stone and K. R. Mullins were elected for the Arctic assignment. This was in May 1944. A few days later at high noon about the fourth of June this department performed its first official act—making out leave papers for a departure at 1600 that afternoon.

Returning from leave some ten days later we found that the draft had been formally transferred to form 1058 and everything had been done to get rid of us as quickly as possible. Lt. Comdr. Chris Wilson, temporary OinC, was aboard, together with the Officer Personnel for all departments of the draft. In less time than it takes to say "Ikpikpuk" we were loaded on a special train and heading west for the port of Tacoma.

Half way to Alaska the yeoman contingent of the department was cut right in half when Mullins got land-sick at a port-of-call and was forced to remain behind. This brought forth a hurried call to BuPers for a replacement. BuPers answered with its usual efficiency and one of the first flights in September brought E. N. Nash, Y1c, from a soft station force job at Camp Parks to the land of all work and no play. An amusing incident of his coming arose out of the sad fact that we had had no mail for about six weeks and were expecting some on each plane. Poor Nash had to eat his first meal in the temporary Chow Hall to the accompanying music of the oft repeated phrase, "No mail—just another ______ yeoman." Later on Mullins recovered his health enough to talk the doctors into allowing him to proceed, and again the cry was heard, but louder.

The department proceeded with its usual routine without event or change until November, when Lieutenant Hitchcock was recalled to his beloved California, and Lt. (jg) H. C. Gillen took over the temporary duties of Executive Officer. Lt. Jim Hugg became Personnel Officer immediately after our arrival at Madesville and served efficiently in that capacity though a Petroleum Engineer by trade. In February 1945 the Office Force was augmented by the arrival of R. W. Swenson, CY, who was also the yeoman in the Executive office for 3050 at Quoddy Village.

In twelve months' time the office has progressed from the tent and gasoline lamp and field desks and a lonesome yeoman to a bustling office of Seabee built desks, electric lights, and regular routine that grinds out the work by day and dreams of home by night—when not working—By J. S. Stone.



Left to right-NASH, OGLE, STONE, JOHNSON and SWENSON.

MEDICAL DEPARTMENT



DR. SAUL MACKOFF LT. COMDR., MC, U.S.N.R. Medical Officer



DR. L. SCHOENLEBER, JR. LT., DC, U.S.N.R. Dental Officer

The Medical Officer in Charge was Dr. Saul Mackoff, Lt. Comdr., MC, USNR, whose home is in Chicago. Under his direction a complete hospital unit was established. The stress by the Medical Department was to prevent illness and injury and the complete lack of critical cases in either category is the finest tribute to our Doctor. Emergency treatment units were established at other points of operation in the Reserve, as well as provision made for treatment during the freighting across the Arctic slope. In addition to helping the camp personnel, Dr. Mackoff served the native village of Barrow at its government hospital in innumerable emergencies—from broken limbs to delivering babies, from providing penicillin to surgical skill.

Dr. Louis Schoenleber, DC, USNR, was from North Arlington, New Jersey. He reduced his own



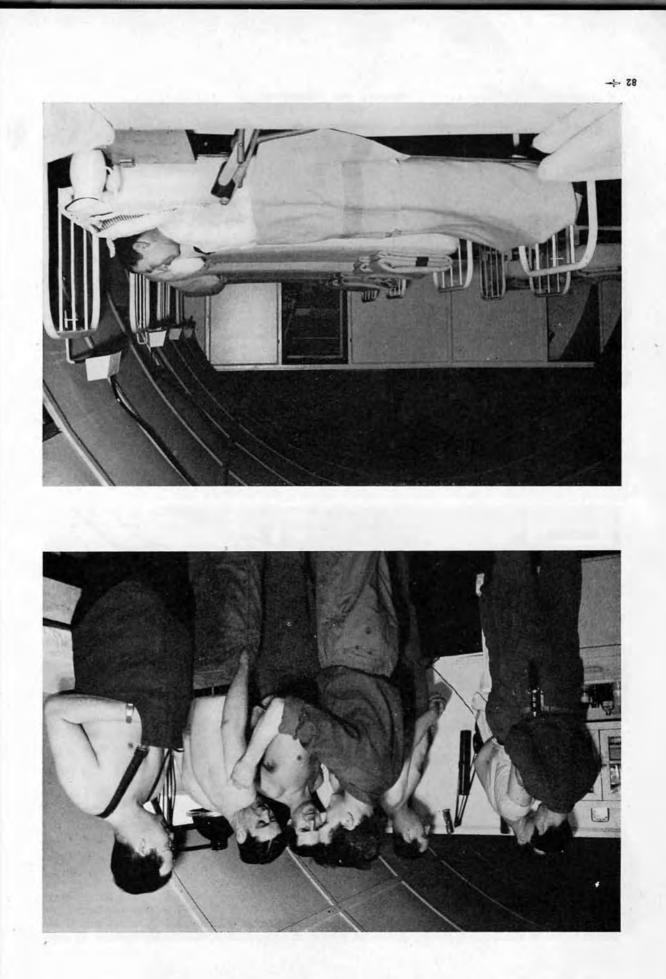
labor by strongly urging prophylactic measures to each of us and through his care we managed to stay our various stages of deterioration. Our Dental Officer also provided emergency treatment to both white and native residents of Barrow. In addition he travelled throughout the Reserve, checking on the men at the inland camps. We think he did an excellent job—and wish him well in his next duty.

Three Corpsmen were included in the original draft, and were under W.O. George Bourne. Whether riding the freight trains or sharing the difficulties and inconveniences of our inland camps, they met every emergency with real merit. We threatened to thread them to an ice cake with their own needles if they didn't stop using them, but the Navy's medical regulations are usually pointed anyway so we made our peace. Their job was done well, though, and on the lighter side, the dispersal of pills and sympathy with mutual abandon eased many an imaginary pain.





Corpsmen, left to right-BAKEVICH, VANDERFORD and KINCAID.





LT. HARRY F. CORBIN

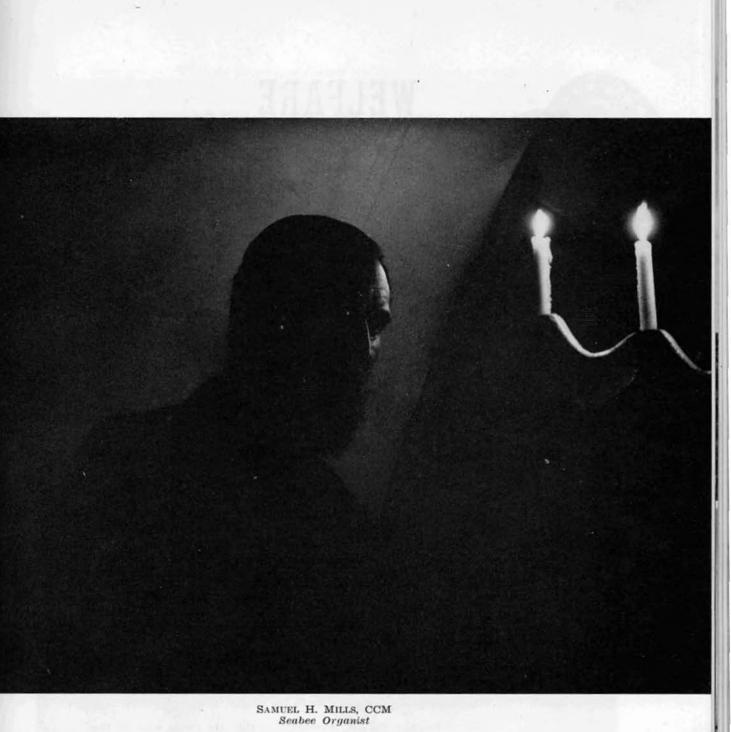
Chaplain

The Seabees are hardly among the usual churchgoing group in the States. At least they are not to be classed with the overtly pious. Far away in the Arctic the men had much time to review their interest in the Church and what it stood for. With a chaotic world in the last throes of its sadistic upheaval many of these men participated in our very general service because they saw that this medium is at least one through which men and women may work to achieve a world of their choice. Far from finding unanimity of belief, they nevertheless felt and were deeply conscious of unanimity of purpose. Consequently they made their contribution in time and effort-and enjoyed the fruits of fellowship in a worship contrived to uphold all the worthwhile values in life-whether basically religious or secular. Neither creeds nor converts were involved-but a sense of mission embodying the spirit and ideals of Jesus, stressing the dignity and worth of all human beings was shared by these men. We agree with those who still think there are many disbelievers in fox-holes the world 'round-but only the mentally ill are not interested in a better world; and this detachment used its worship service as a rallying point for all constructive thought whether or not it was clothed in the garments of tradition.

CHAPLAIN



A visiting Catholic Chaplain holds Mass for men of that faith.



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RECREATION

... and ...

WELFARE

Simply because we were in the Arctic the entertainment and recreation available to the 1058 Seabees was limited. Consequently one of the most popular spots with the men was the Recreation hut. The "Rec Hut" afforded us at least a measured amount of fun, play, and relaxation. Ping-pong was played constantly—and watched by dozens of men who never played. Checkers and chess were played by almost everyone and though we settled few championships, every man staked his claim. For those who had the patience to piece together complex puzzles, some were always available, and occasionally some determined soul would sweat one out all night and greet the innkeeper the next morning with a tired but satisfied gleam. Others found pleasure in just reading from our above average library, writing letters here, or listening to records which were played on our big combination radio-phonograph that played incessantly from Point Barrow D-(Despair) Day to the time of this wind-up.

These recreational facilities did not, however, constitute the major work of the Recreation and Welfare Department. The movies were without any doubt our main source of entertainment and pleasure. Whether good or bad, we went to them all—and willingly played stupid right with some of the would-be comedians we laughed at. A few movies seeped to our inland camps, but as a whole they were dependent on themselves for good company and strong nervous systems. When without movies because of a schedule foul-up, Bingo parties were put on—with pipes, tobacco, and beer invariably going to the non-imbibers, shaving equipment to the beardless young, and combs and brush sets to the bald. The department sired a camp newspaper, "The Arctic Gusher," which is probably the only newspaper ever published north of the Arctic Circle and won, for lack of other bids, the contract for writing "Com Ice Pac Reports."

The "Top of the World Masonic Club" was formed under department auspices, and provided its members a close measure of fellowship which is seldom available in larger groups. When the temperature climbed way up to 32° and 35° in the summer the first Arctic Baseball League was formed, and the cry of "Play Ball!" was heard 400 miles above the Arctic Circle. It was cold, but fun, and the interest was maintained down to the final wire when the "Dozers" bested the "Dogfaces" and "Barrow Boots" in the play-offs. A baseball champions' dinner was held with the losing finalists serving the league and play-off winners.

Radio reception was incredibly bad and as a result, a local radio station transmitted records and program recordings which could be picked up on the small radio sets in each hut. At the end of the first year this phase of entertainment was being expanded and had promise of equaling any armed forces radio unit. Fairbanks and Seattle daily papers often reached our camp on the same day they were published, and supplemented the mediocre radio reception available to us.

A Wednesday night "War Orientation" hour was held and served as a clearing house for news and views of those who attended. The Chaplain made an effort to present the latest developments and then discussion was carried on until either an impasse was reached, or some common ground was found. Perhaps we solved no world problems in these sessions, but we were keeping aware of the needs of a world in chaos and sharing opinions in the best democratic tradition. That the discussion usually ended in a verbal holocaust was incidental to the full force of conflicting opinions and letting off pent-up steam. Mathematics and psychology classes were provided and at least helped to keep us alert and our senses alive, as well as reminded us of better days ahead.

Red Cross contacts were a part of Welfare activities and innumerable cases were handled in the course of the year. Flowers and telegrams were used to remind our loved ones at home that we were still kicking, and that we were constantly thinking of them. Mostly we just worked all day and dreamed all night, using the facilities of the Department of Welfare and Recreation to while away the hours which were incredibly long and more trying than we like to admit.



CHAPLAIN CORBIN, right, and JIM SOURS, at work on "Com-Ice Pac Reports." CHAPLAIN CORBIN was Welfare and Recreation Officer and SOURS was Welfare assistant.



Winter Recreation in the Arctic, or . . . "Liberty's Alternative"



"Music in the Matzi Manner" Left to right-Matzi, Parker, Mills, Wallen, Sours, Ormbrek, Milliren, Biggs and Lindsey.

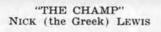
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Charter members of the "Top of the World Masonic Club." This club was sponsored by "Tanana Lodge No. 162," Fairbanks, Alaska. In center is CHARLES D. BROWER, honorary member, , the "King of the Arctic."



Seabees listen as CHAPLAIN CORBIN brings them up-to-date on current world affairs during a War Orientation period.





"UGH!" OR "PARDON US, BUT YOUR SLIP IS SHOWING."

.









"SPRING TRAINING" Left to right — BURNEY, PEN-NINGTON, LECKIE, TAYLOR, ROBINSON, WIGET, MAN-GOLD, SKINNER.



"Ste-e-e-rike!!"





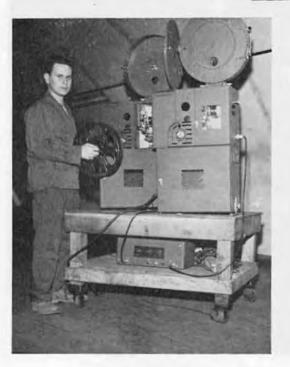


The Arctic Champion "Dozers." Left to right — HOLT, ELKIN, BIGGS, NORTON, MAURICE, ECC-LESTON, LT. COMDR. REX, OINC, OLSON, LINN, LEATHERWOOD, RICHARDSON and CHAPLAIN CORBIN.



Saturday Night





HE ARCTIC GUSHER 1 8"4 BROWER DIES CHARLES DIGORY



A Man's Best Friend ...





"Well . . . we tried!"

Photo Lab Barber Shop Post Office Censor

Our photographers did a superb job of photographing every phase of the Arctic Oil Expedition. M. R. Jensen ably assisted CPhoM M. B. Jondall, whose work in pictorializing the entire operation was considered especially outstanding. Jondall was on one freighting trip and took color and moving pictures. He flew to our inland camps and made work progress shots of every activity which was carried on. His only regret is that the fantastic Northern Lights and winter storms did not lend themselves to picturetaking, and it is a bit ironic that the North's nature extravaganzas could not be reproduced. If cameras didn't freeze up, which often occurred, then his hands did, but he managed to give a highly creditable performance under extremely adverse conditions.

John Matzi was our barber, and while he lacked the running water with which to add the niceties of his tonsorial skill he did a grand job. We often complained about his "Chair," but he reasoned that we wouldn't object to a quick job if a little uncomfortable. A fine musician, John played his guitar for us often.

Vernon S. Watt, world's northernmost Navy Mail Clerk, bore the brunt of our discontent when the mail failed to come, but was wooed with loving kindness on the successful days. It isn't settled yet whether we gave him a bad time, or he gave us one, but his work and progress was warmly followed by each of us, and we thank him for going the second mile plenty of times.

H. B. Porta, (blankety blank) censor—but we loved him, honest we did. He knew so many of our secrets we were prone to blush in his presence, but his was a strictly professional attitude. We tried to run a few occasionally, but our wives and sweethearts didn't appreciate the gaping holes in our letters, so we toned down and gave a minimum of trouble in late winter. With the spring, and thoughts turning to . . . but we didn't dare think of such things, and furthermore, spring is more poetic than real in these parts. Porta did a swell job, and we appreciate his labor over our loves.



Photographers JENSEN, left, and CHIEF JONDALL.



Onlookers (left to right) JENSEN, PORTA and HAMMOND find BARBER MATZI'S version of an Arctic "crew cut" quite amusing. The victim is JOE STEFFENS.



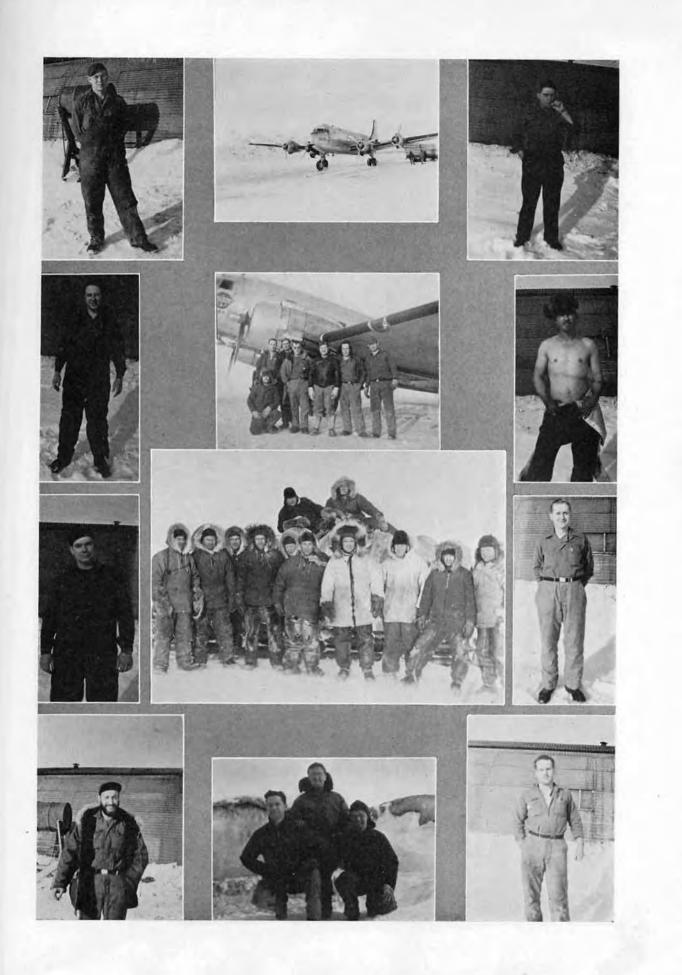
WATT, mail clerk, and PORTA, censor, observe a mid-July snow flurry.





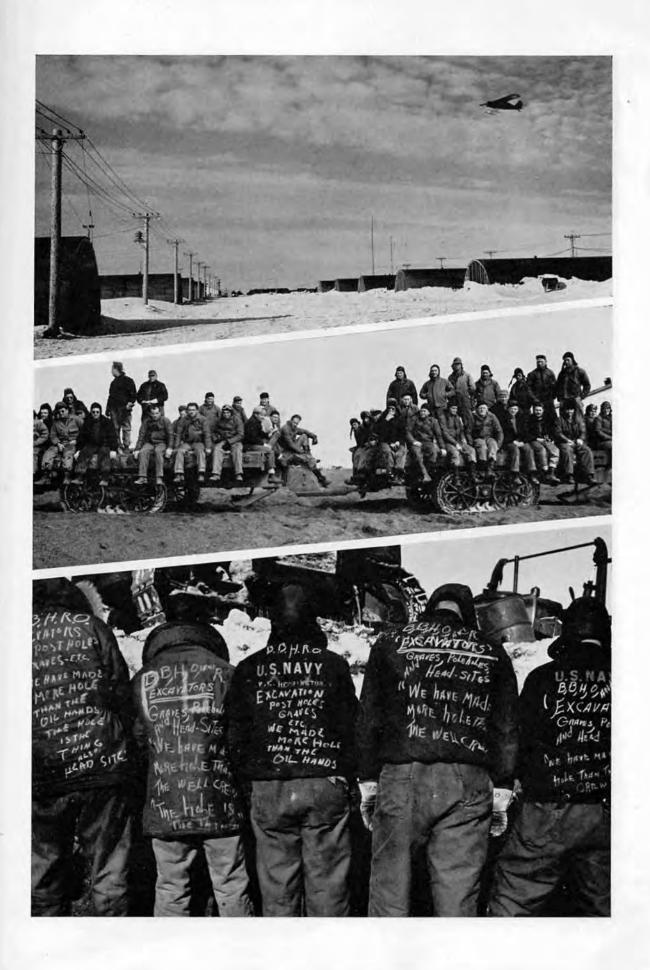


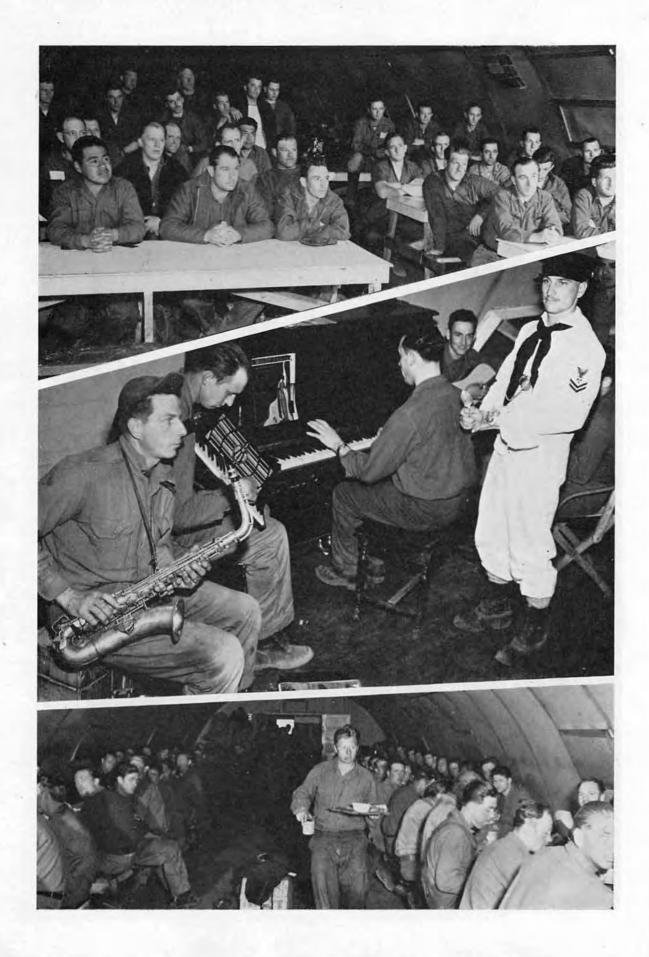


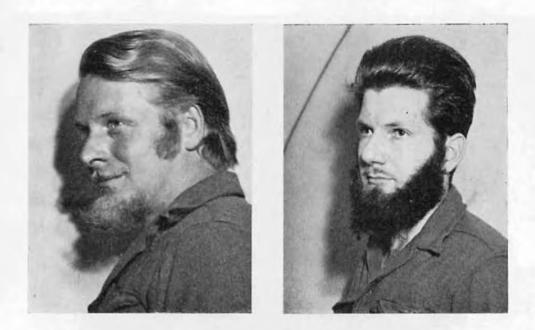




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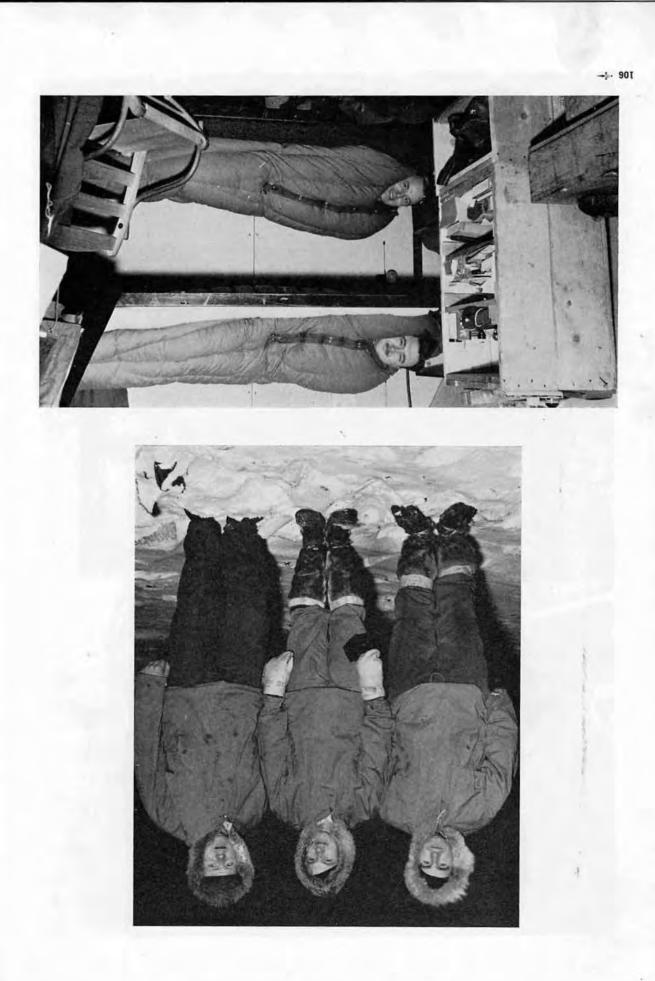




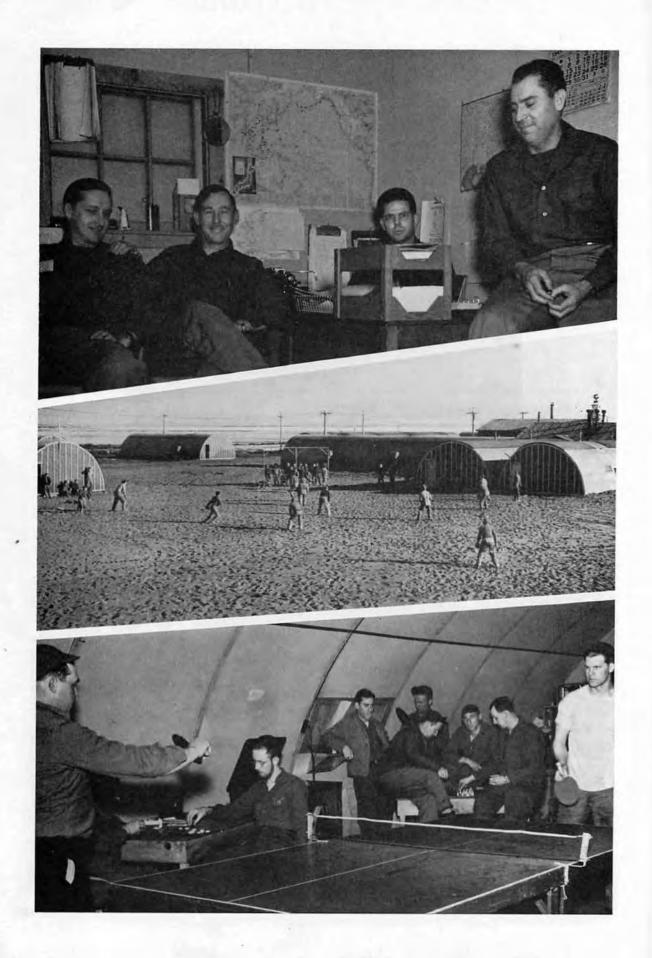


BEARDED BUILDERS

Strong features, rugged bodies, Sons of pioneers of yesterday— Matching the elements, Beating the Arctic— Conquering our last great frontier.



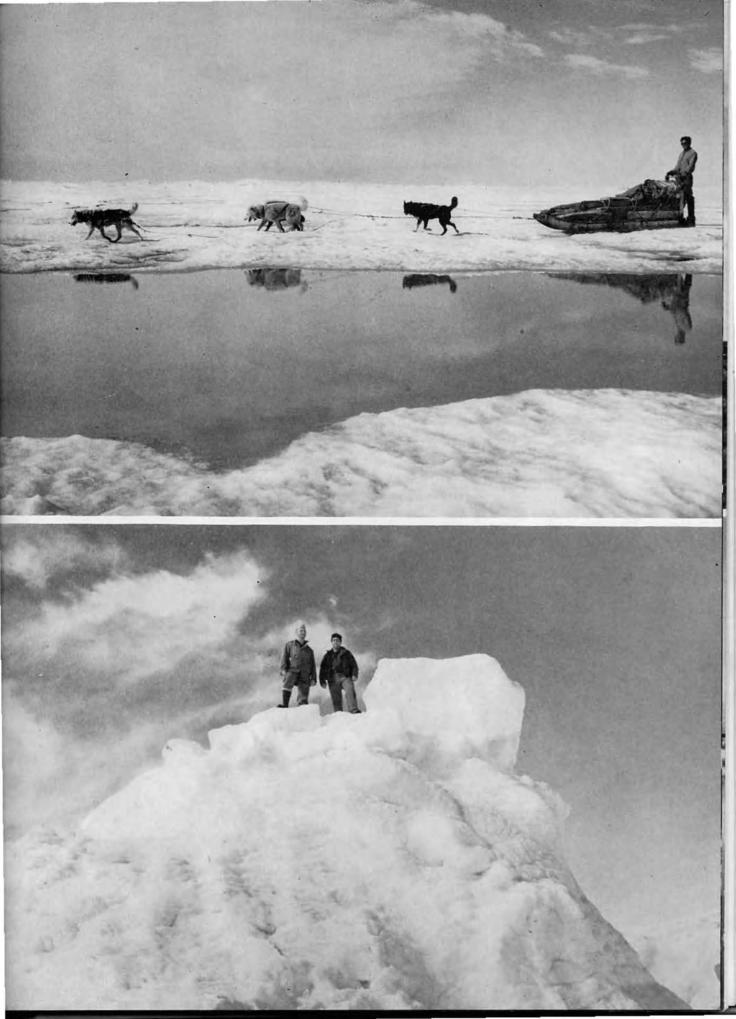




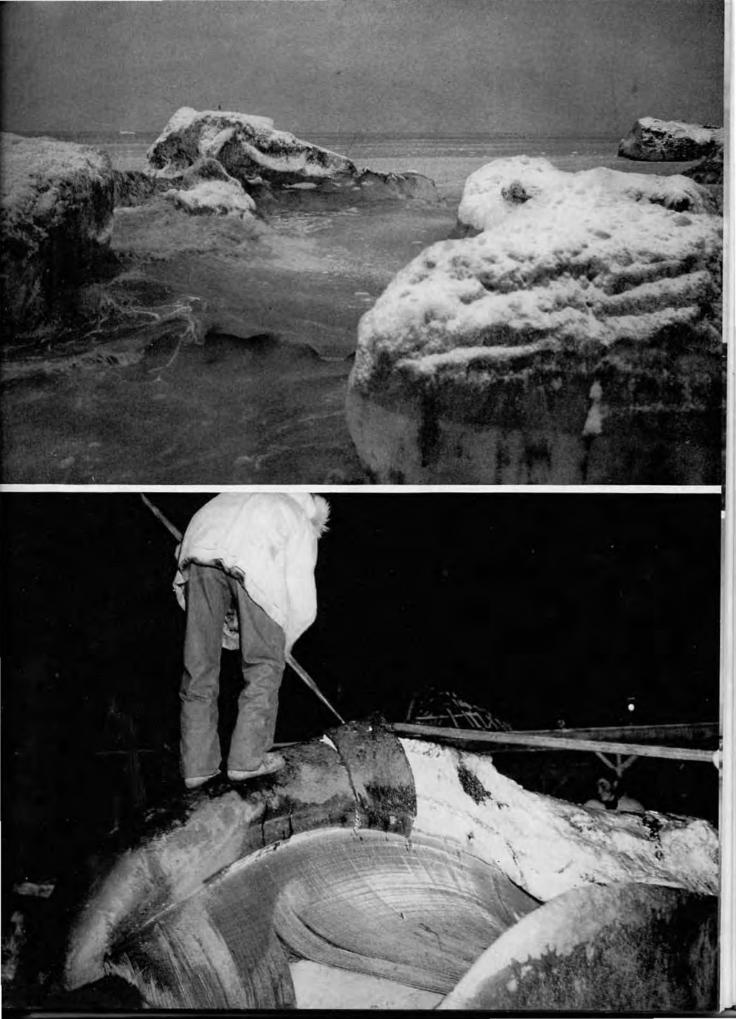


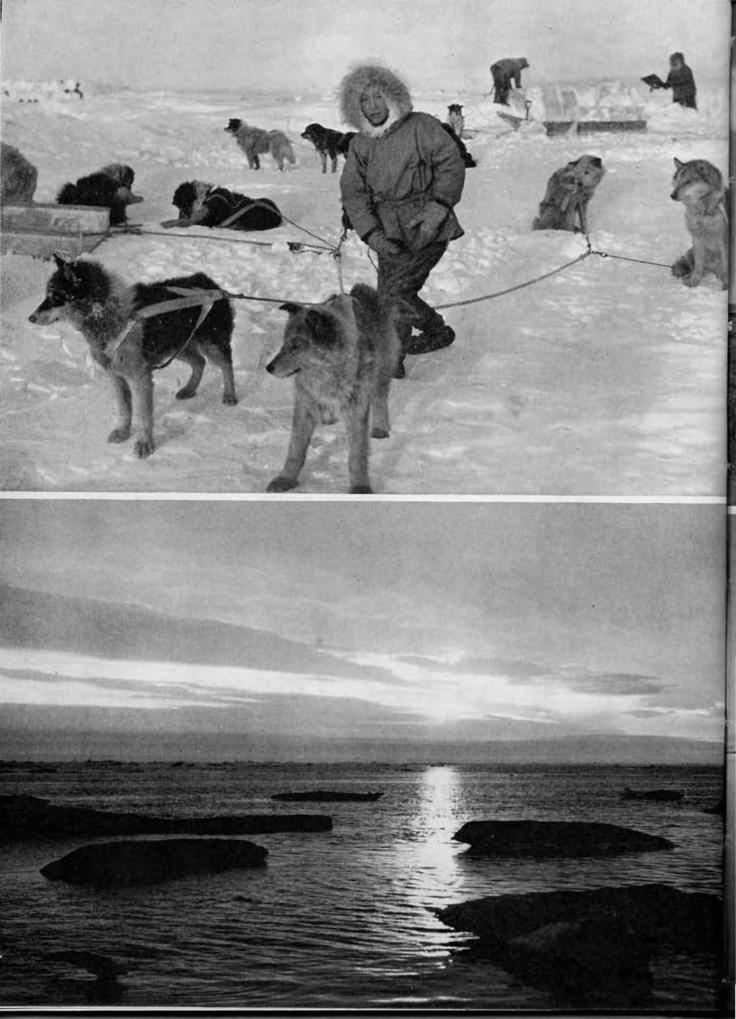










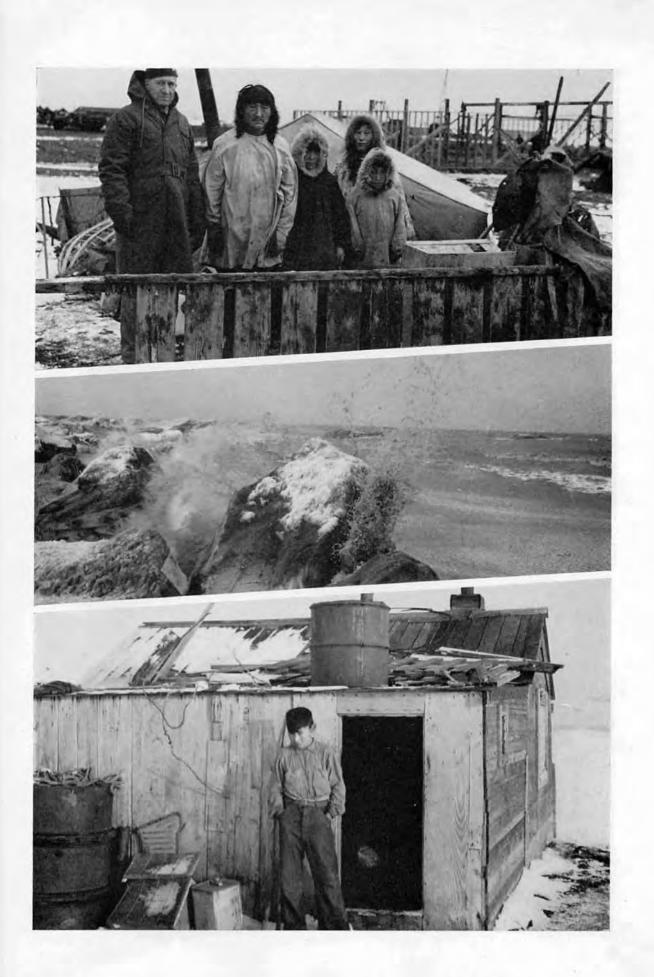




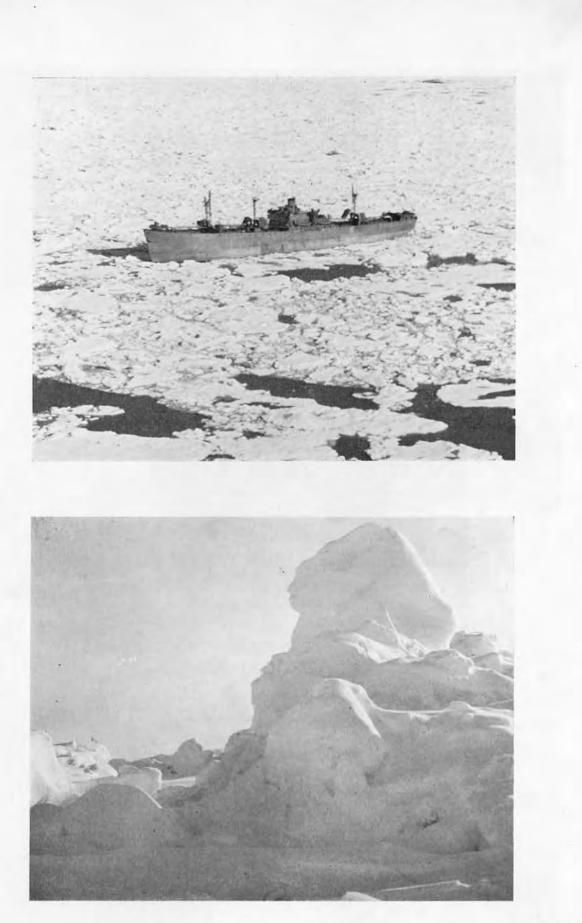














I lie alone In my northern rampart now: I played, loved, hunted, And now return To the bosom of Mother Earth; Wrapped in a blanket of snow, Enshrined beneath majestic Northern Lights, Child of a fierce land— My bome eternal.

IN MEMORIAM



JOSEPH WILLIAM WALLEN

Without the fanfare of battle or the intensity of combat many men have given their lives in the service of their country. Joe did a hard job well under extremely difficult conditions, which is the maximum in Seabee lore. All men associated with the first Arctic Oil Expedition honor and pay tribute to bis memory.

The ARCTIC ICE COMPANY



Left to right-Icemen BIRDWELL, LYNCH, KING, HUDMAN, HUSTEAD, LEE, COOPER, KEMNITZ, KOLB and PIESTER.

This is the sad story of the Arctic Ice company. No one knew whether or not the fresh water lake froze to the bottom. The natives cut their ice early and had not had occasion to test it in late winter to see if you could still draw water from it. To forestall waterless days the Seabees cut 100,000 cubic feet of ice, for melting purposes, calculated to last through five months if used carefully. CWO Wesley Burgess, drilling superintendent, but in charge of this crew, with Chief Robert Spohn, a sunny California driller and twenty of the hardiest of the lot, sweated out this ignoble experience. Seabee ingenuity is, modestly, world renowned, so something akin to a portable washing machine, which would cut ice rapidly and in great amounts might have been expected. But somehow we got royally fouled up. We did it the hard way—as the natives had done it for Lord knows how many hundreds of years. The Seabees watched the natives cut it laboriously by handsaw, tie on to a 300 pound cake and pull it out piggyback. Not to be outdone, the men involved, against their better judgment, but apparently determined to show their strength, pulled it out like truck horses. No one has figured out yet how we got into that strong back contest, but pull out 100,000 cubic feet by sheer muscle we did, and to our eternal shame. It was miserably cold, hands would nearly freeze. The wind and snow blew until you could cry with disgust, but somehow, it was done the hard way, we bitterly called it "The Navy Way."

Nor did the "Arctic Ice Co." have any better luck on the retail end of its business. In the first place the lake only froze about six and a half feet deep, leaving plenty of room to pump water. Consequently we did not use the 100,000 cubic feet of ice we had produced for water supply. Burgess and Spohn reputedly made two sales of twenty cents each to the Officers Club, but the rumor was never verified. It was a sad tale, that of the Arctic Ice Company, and we don't speak of it in these parts, stranger.

RECONNAISSANCE PIPELINE SURVEY

Seabees and Alaskan Scouts



LT. L. M. BERLIN



Left to right—LT. (JG) P. G. DAUBEL, LT. E. G. BRANHAM and CAPT. G. J. RAU in Anaktuvuk Pass.

In September 1944, survey work was done from Fairbanks to Livengood as a preliminary to a possible pipe line which might some day stretch north from the Alaskan queen city through the Brooks Range and bring oil from the Arctic slopes. Lt. L. M. Berlin, with both Arctic and Antarctic experience to his credit headed the Seabee Pipeline group, with Lt. (jg) Paul G. Daubel in charge of the field work.

Lieutenant Berlin was also Liaison Officer between N.C.B.D. 1058 and the Army at Ladd Field. As Supply and Material Expediter his office was in Fairbanks. His work was especially valuable to the success of the expedition.



Part of surveying crew, 9 November 1944, left to right—HANDLEY, WEST, BABCOCK, PROSSER, COX, KELLOW and HEATH. Not shown are GIVENS, WEDAMAN, HOPPER and GALEY.



Left to right-LT. BERLIN, MULLINS, MCGEE, CROSS, CLUTE.

These Seabees were sent to Fairbanks from the Arctic camp to serve under Lieutenant Berlin. The rest of us thought they were lucky. At Fairbanks prices, they were not so sure.

ALASKAN SCOUTS

Following completion of the 1944 pipeline survey done by a Seabee detachment of twelve men, it was decided that a reconnaissance survey could best be performed by smaller groups operating during the late winter months. Available Seabee personnel were not experienced in winter travel and lacked proper equipment. A request for the services of the First Combat Intelligence Platoon, Headquarters Company, Alaskan Department was directed to Lt. Col. R. A. Matter, GSC, Director of Intelligence for the Alaskan Department. This platoon is known as the Alaskan Scouts and as such saw extensive service in the Aleutian campaign. Three patrols, totaling eight men, were assigned to the winter pipeline survey. Two more enlisted men and three officers assisted in preparations and maintained contact with patrols in the field. Winter travel was by dogsled and caches of food and equipment were put out by ski-equipped airplane. The route mapped was selected by Lt. L. M. Berlin and Lt. (jg) P. G. Daubel, both attached to N.C.B.D. 1058. In completing the winter survey the Scouts traveled an estimated distance of 2,000 miles by dogteam. They encountered temperatures ranging from -46° F. to -33° F. and undrifted snow as deep as 44 inches. The Scouts were mostly veteran Alaskans, were rugged and well qualified for their type of work.

The pipeline survey was completed this summer by one patrol of nine men under Captain Rau. Boat and dogsled served all these parties and each group received airplane coverage. Lt. E. G. "Bud" Branham and R. P. Reynolds, AMM1c, of Navy Air Sea Rescue contributed consistent and valuable support. Major Ragel, Lieutenant Dean and Lieutenant Gallia of Army Search and Rescue Squadron and Captain Barnett and Lt. Col. Sipe of Army Cold Weather Test gave constant aid and support.

Closer to the center of the Seabee Activity in Northern Alaska were four additional Alaskan Scouts, L. W. Menke and H. C. Sparks were with all of the freighting trips and showed tremendous ability and ingenuity on the trail. Finding the way across a country almost completely devoid of landmarks takes a clairvoyance akin to a crystal ball expert, but these two men had developed the native technique of sniffing the air, observing drifts, and had a sense of direction which comes only after years of such living. Two additional Scouts, E. R. Bagley and Andrew Curtin, were to span the rough territory from the head of the Ikpikpuk to Umiat in establishing a route for the sled trains. During the operation Curtin was to lose his life.



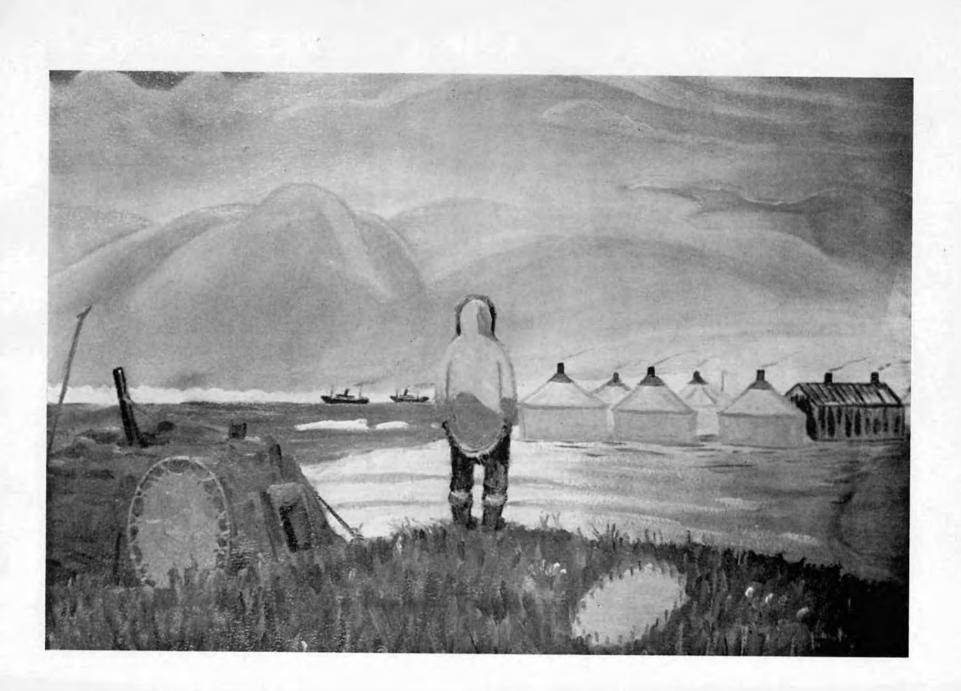
THE LOST SCOUT

In this spot, Which is truly no man's land— In darkness and swirling snow, An Alaskan Scout, As with all our dead of this war, Gave his life that we Might find the way Less difficult.

U. S. COAST AND GEODETIC SURVEY

At the request of Capt. B. W. Gillespie, through the Bureau of Yards and Docks, the Navy asked the United States Coast and Geodetic Survey for a ship to take soundings and to make a coastal survey of the north Alaskan area in order to facilitate cargo discharging and ship anchors. Though a ship was not available for this purpose a small shore party was sent to the Navy camp to do the necessary work. With limited transportation available, this party made use of dogsleds, native boats, and a monstrosity of their own which turned out to be a sled with oil drums as wheels. This type of ingenuity insured the success of their operation and the groundwork has now been laid for a complete North Alaskan coastal survey. Not since the British, in 1853, made a brief report on this area has any recorded work been carried on. Plans are now in process to chart the entire region in the next few years, and to provide a complete up-to-date survey of this vast territory. Under the direction of Lt. Comdr. R. W. Woodworth, the party working in the summer of 1945 included 8 Coast and Geodetic Survey personnel, 12 Seabees, and about a dozen native guides and laborers. Among the Seabees was CCM. J. L. Lyng, who for many years has been a hydrographer in the San Francisco area.





NAVY WEATHER



Navy Rainmakers: Back row, left to right—GILEWICZ, MANNING, WILLIAMSON, GAUL, HAMILTON. Kneeling—LT. (JG) KENT, LT. (JG) HILDRETH. Not shown: HELZER, GODFREY.

In February, 1945, Lt. (jg) William W. Hildreth, USNR, arrived from Kodiak to establish a weather station. Accompanying him were five enlisted men. Prior to their arrival the various pilots had been dependent for weather information on sheer speculation, ranging from their own, to the guesses and observations of Dick Christian, SC1c, who was stationed at Umiat in mid-winter and whose voice filled the Alaskan airways with weather "data." The latter's success is evidenced by the lack of catastrophe in the mid-winter operations.

However by 1 March 1945, the official weather men were established and struggling with the difficulties peculiar to this area. Extending into the Arctic 400 miles above the famed imaginary circle, it was only in two directions that any aid was received, and neither of these was within 300 miles. Aclavik to the east, Kotzebue to the west, and then, of course, Fairbanks to the south if 500 miles and the intervening Brooks range are not considered prominent barriers.

Several factors posed difficulties. New phenomena to most weather men were the ever present ice fog and continual 20° to 40° below zero temperatures. Blowing and drifting snow were also features which pilots needed to judge since much contact flying was done, and ski planes were used. Also, the Arctic Ocean with opening and closing leads in the ice affected the prevailing weather.

ing leads in the ice affected the prevailing weather. Questioning of natives, N.A.T.S. pilots, and by constant interrogation of Sig Wien and George Oswald, Hildreth gathered information that the standard weather map could never provide. His interpretations have served incredibly well in the midst of extremely variable conditions. To the personnel in the "weather exploring" department, "Hats Off!" to a job well done.

ACS and AACS

In order to facilitate the handling of planes and provide a reasonable margin of safety for them, the A.C.S., already operating extensively throughout Alaska, sent men to the Seabee camp under Lt. Jim Allen to establish a ground-air communications system. One of the important functions this permitted has been the providing of weather data for the considerable number of planes involved in the project. Col. Erwin L. Kaufman, Alaskan Department Signal Officer, and Lt. Col. W. L. Wardell, Area OinC of A.C.S., were instrumental in the early support given us by Alaskan Communications System.

Early in the fall of 1944, Col. Haskell E. Neal, Commanding Officer of he Third Army Airways Communications System Wing, was instrumental in providing the groundwork for A.A.C.S., arrived here and later Lt. Col. Forest W. Donkin relieved Colonel Neal. With the arrival of Lt. Sol Singer on 21 December 1944, later replaced by Capt. E. V. Rasmussen, the A.A.C.S. organization took over, expanded, and equipped itself with everything necessary for a complete station. In December, 1944, only 12 groundto-air contacts per day were made, whereas $3\frac{1}{2}$ months later this number had grown to 125 per day. This figure compares with a much larger station where more men and equipment would ordinarily be available.

In addition to their ground-to-air contacts with planes the Army Airways Communications System worked the sled trains, enabling them to maintain contact with the home base even when planes were grounded and unable to spot their progress.

The A.A.C.S. has met the challenge thrown at them by North Alaskan weather difficulties. Their service has made easier the support of this project though air transportation and though such service is quickly taken for granted, it constitutes an important link in the innumerable activities which must work effectively if such a mission as that which the Seabees have undertaken is to work successfully. The A.C.S. and the A.A.C.S. have done their jobs admirably in this Arctic outpost.



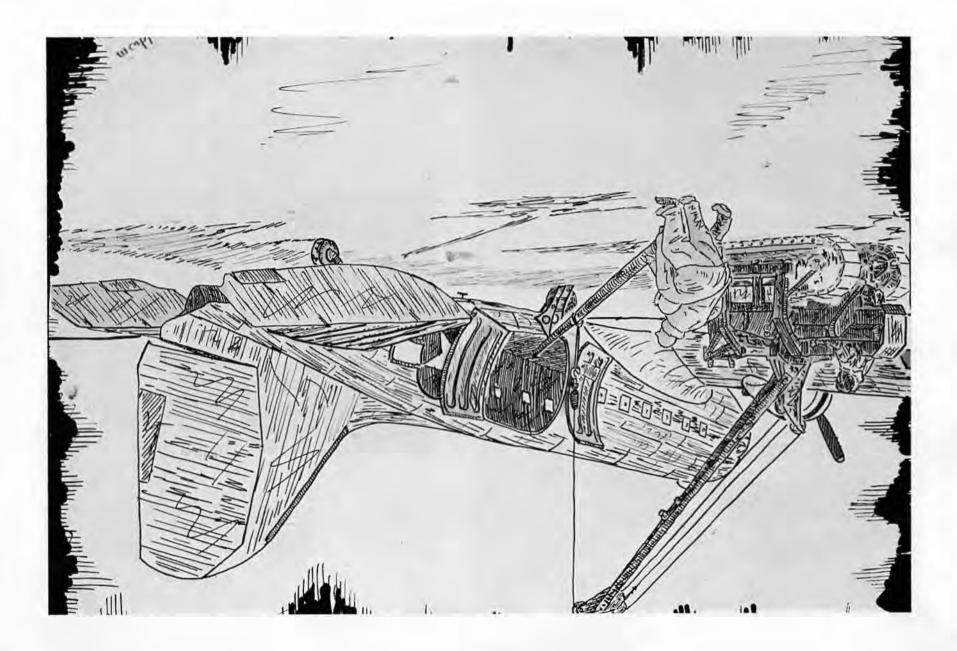
A.A.C.S. Men: Back row, left to right-CAPT. RASMUSSEN, SMITH, BREWER, PARKER, OWENS, SACHS, ANTOVILLE, MENTCH. Kneeling-MARK, KRAFT, ROLLOW, KALMAN, JUNGERES, TRAILER.



A. A. C. S. Men: Standing — JOHNSON and SWEARINGER. Kneeling—BITSKO and MORSE.



Army radio men-identification not available.



AIR SUPPORT

The expedition was cut off from the outside world except by supplementary air transportation. The coast is ice-bound for all but six weeks each year, so ships could not assist us. And even the Seabees do not build roads in the Arctic. However, while we discharged cargo in August of 1944, Marion A. Deutsch, Section Operations Superintendent for Pan American Airways arrived and conferred with Lt. Comdr. Rex. P.A.A. had the Navy contract to support our activity and even before our airstrip was completed, small Electra planes were landing on the sandy beach, to be followed by the larger DC3's. Pilots Joslyn, Foster, McLennen, and many others flew under the most rigorous conditions and without aids of any sort, in the early days, and we admired their work. P.A.A. served the expedition until January 1945, having worked up to daily runs that brought us mail, vital parts and provided us a link with the outside world. Through the pioneering work done by P.A.A. this expedition profited and received vitally needed support.



NAVAL AIR TRANSPORT SERVICE

With the first Navy flight on 23 January, 1945, and the assumption of full air support by N.A.T.S. on 1 February, our air activity assumed rather large proportions. Capt. H. C. Hollenback, VR-5, selected Lt. Comdr. Bob Lawless as OinC for the N.A.T.S. flights out of Anchorage and Fairbanks. The cargo that was to be flown in during the succeeding months assured the maintenance of an adequate supply line for our far-flung operations. During March and April two and three flights daily were coming in and in addition these same planes were shuttling cargo to Umiat on the Colville, landing regularly on a small frozen lake, which exacted the highest in craftsmanship from the Navy fliers. From weasels, drill pipe and heavy oil well casing, to barrels of fuel the endless procession of harried pilots to this 40° below zero rendezvous wrote a new chapter in Transport Service throughout the world. Many pilots contributed; a few who came in very often were Stern, Whithead, Jacka, Walker, and Lawless. Responsible for the N.A.T.S. operations at the receiving end of the line were Chief Webb J. Disney and E. P. "Squeaky" McCray.

Lt. E. G. "Bud" Branham, a long-time Alaskan pilot headed the Navy "Search and Rescue" groups. Additional pilots included Ensigns Bline and Swan. Flight Mechanic Radar served with each of these men.

Taking advantage of every source of support, Army planes from Ladd Field pitched in at crucial times with over a hundred flights. The C.A.A., A.T.C., and Cold Weather Test, the latter under Colonel Sipe, all had ships in this group. Their assistance was invaluable.



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WIEN ALASKA AIRLINES

Integral to the Seabee Arctic Oil Expedition was the air support of the Wien Alaska Airline. Sig Wien, President, General Manager, and Chief Pilot, is legend in this country. Forty-one years old, a bush pilot for 15 years, Sig has been in Alaska since 1930. He has flown over 9,000 hours since he was 28 and over half of it has been above the Arctic Circle. Using everything from a Piper Cub to a twin-engined Boeing, Sig and his pilots, George Oswald, Wurtenan Wano, Bob Rice, W. E. Stone and H. L. Mensing have met every challenge the Arctic has thrown at them. Specifically, Sig and Ozzie were instrumental in establishing the Umiat and Simpson Camps by air. Early reconnaissance trips were solely dependent upon their knowledge and experience. Familiarity with every lake and knoll on the great Arctic slope was an invaluable asset. Facing sudden changes of weather, often without radio aids, flying contact—but consistently harried by ground fog and blowing snow, they casually and confidently did work for the expedition without which the activity would have been grounded throughout the dark months of December and January.

Odd were the trips you might take with them. As a passenger, you might carry the plane's radio on your lap, wipe oil from the windshields, or hold a window in place. Emergency landings, by ski, pontoon, or wheels were all alike to them, and taken in stride. Some of their flights border on the fantastic, but Sig Wien would not want them told in that vein, for there is no mystery in it to him, no great adventure, nothing melodramatic. Wien Airlines supported the sled train by way of supplying mail and emergency items.

They shortened the trail by observing likely cut-offs and marking them with flags. They carried personnel about the reserve, made innumerable cargo flghts, and were generally indispensable.

From skis to wheels to pontoons, Sig, Ozzie, Wano and the rest winged their way into the fore of this operation. Modest in their accomplishments, they did things in the Seabee manner, and that was good.



GEOLOGICAL SURVEY



LT. W. T. FORAN Chief Geologist



LT. JIM BRAZIL Assistant Chief Geologist

Seabee propelled that the Arctic Expedition was, in the spring of 1945 we were literally over-run by an influx of great groups of Geologists and Geophysicists of every description. Headed by Lt. W. T. Foran and his Assistant Chief Geologist, Lt. Jim Brazil, this was to be the most concentrated geological survey of modern times. All the work by these field parties and specialists had to be completed from 15 June, when the snow is melted, to 15 September, when the North is again blanketed. Combing the creeks and rivers for outcrops, working with seismographs, core drills, gravotemeters, and magnetometers, they compiled more geological information in three months' time than might have been expected in a ten-year survey. Much of the Seabee mission was fulfilled in laying the groundwork for these varied activities. Supplies, food and equipment were provided throughout the reserve for this work.

To weld these diverse groups into a coordinated whole was a major undertaking in administration and diplomacy. The gigantic fund of information established and correlated by them in their brief period of work is the answer to critics who thought the Arctic Oil Expedition was doomed to failure. Exploration, not production, was the goal. The early work in establishing camps, the long overland treks, endless nights and bitter cold were being softened in memory for that work was reaping a worthy dividend.



Standing, left to right—Geologists PHILLIPI, KREIDLER, ROGERS, FISHER, TAYLOR, PAYNE and FORAN. Kneeling, left to right—Geologists BRAZIL, MCCONNELL, HEINRICHS, WAYMAN and CORTES. Not pictured are Geologists JOPLING, TEMPLETON, FOLK, BROWN and RELF.



Men of the Geological Survey field parties-identification not available.



Magnetometer party . . . they did experimental work which might serve to corroborate and correlate other geological information.



LEWIS W. MACNAUGHTON, representative of the firm of De Golyer & MacNaughton, Dallas, Texas, engaged by the Secretary of the Navy as special consulting geologist on all matters in connection with the Navy Petroleum Reserves.

CAMP SIMPSON

Cape Simpson figured in the original base camp plans, for it was here that much of the exploratory work was to take place. An abundance of oil seeps indicated extensive possibilities. C.W.O. Don Meek was the OinC of this camp which flowered during the summer months. It was established in the dead of winter by plane and sled train. With equipment, food and housing provided, the area mushroomed into a sizeable place by mid-June. Such men as Schattenberg, Doyle, Dixon, Pennington, Roberson, Hustead, Duffy, Kincaid and Kline were in the initial 1058 group who not only established Simpson but stayed during the summer months as core drillers, mechanics, cat operators, and corpsmen and cooks.



A small herd of reindeer grazing near the Simpson Camp.



All the conveniences of home. Above-the shower at Simpson.



Core drilling at the Simpson Camp.





Seismograph party under direction of LT. E. J. MARTI (driving).



Simpson core drillers. C.W.O. DON MEEK, second from right, was Simpson's OinC.



Gravity Meter party. LT. F. K. FISK, second from left, rear, was party chief.

UMIAT



"... Long have I waited lonely, shunned as a thing accurst, Monstrous, moody, pathetic, the last of the lands and the first." —Robert Service.

"Umiat" is central in Eskimo mythology. It is here, according to nearly extinct native lore, that the world began. As with the Biblical creation story in Western culture, so it is with Mount Umiat in Eskimo stories. It is in this immediate area that Tululingshruck, combination first creature and God, made his first appearance. By spearing the Earth from his kayak, and raising it above the surrounding black water, he gave the Eskimos land on which to live and hunt. Were it not for Tululingshruck, as recounted by several aged natives on the North Alaskan coast, their world would not have come into being.

And so it is that the Seabees find an interesting cycle becoming increasingly parallel. First it was oil—from Eden to Umiat—wherein similar and equally primitive conditions prevail concerning the discovery and use of old seepages. And now, side by side, a creation story, centering at Umiat, rivaling, comparable to and becoming a counterpart of the Christian creation story. As the mighty Colville River rolls along the base of Umiat Mountain, both of them, monstrous, moody, pathetic—it is not difficult to visualize this faraway challenging country, the last of our lands to be conquered, to have been the first. Five Seabees were flown to Umiat in December to establish our inland terminal town. They were convinced it was the end—if not the beginning of the world. Construction Officer Mades, with Carpenters' Mates Lindsey, Biggs, King, Howe, and Ship's Cook Dick Christian, arrived in late evening with the temperature hovering at 50° below. They were faced with the fairly imposing task of erecting shelter for the night. Finding a tent in supplies which were stockpiled earlier, it had to be thawed out by blowtorch before it could be used. After three days' use their oil stove was still icecovered. They built a "head" the next day, but apparently they decided against such use for they declared it was so cold the results could conceivably have been catastrophic.

In the ensuing months, a radio station was built, and additional equipment flown in, using for landings a lake that was so rough ski planes bounced 5 to 10 feet in the air in getting off.

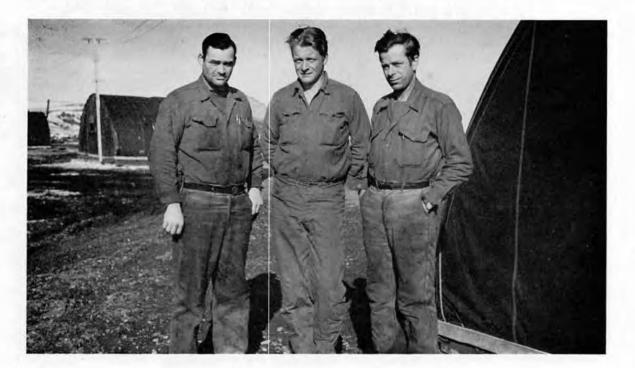
With the arrival of the sled trains, sufficient equipment was available to doze off the lake runway and thus permit the large planes to bring in still more emergency supplies. As trail's end for the freighting operation, "Umiat" was the scene of a feverish effort to complete a year 'round airstrip. With the summer, came clouds of mosquitoes, the bodies of which were over one half inch in length, and they were to challenge weather-stunned Seabees almost as severely as the bitter cold. It is said that there are ten times as many mosquitoes in Alaska per square mile as anywhere else in the world. Those who were at Umiat add their hasty "Amen" to that estimate.

"Wildcat Junction," scene of one of the rankest wildcats ever drilled in all the long and picturesque history of the oil industry, is only eight miles from Umiat. One minute away by air—it remains to this day a half day's trip by foot or vehicle.





1058 men who formed the nucleus of Umiat's personnel. Standing, left to right—LT. (JG) CONNELLY, C.W.O. BURGESS, PURSELL, RIVERS, RASMUSSEN, SISK, THATCHER, OLSON, and JOHNSON. Kneeling, left to right—ELLIOTT, RODERICK, BERRIER and NICHOLS.





H. J. HOBEL, an electrician at the Umiat Camp.



A TREE GROWS IN UMIAT



THE STORY OF THE LITTLE "D-2"

In the middle of the winter it became almost impossible to continue shuttling supplies to Umiat by air. The lake on which the ski-planes were landing was so rough from snow drifts that passengers were ordered to lie down in the plane when landing. The decision was made to fly in, piece by piece, a tractor which could help eliminate the drifts, and assist in camp maintenance. From Fairbanks, 350 miles away, the Wien Alaskan Airlines agreed to fly the parts to Chandler Lake, in the foot of the Endicott Mountains. After four such trips in a twin-engined Boeing the D-2 lay in the snow about 90 miles from the Colville camp. Sig then started from Umiat, always with a Seabee aboard—loaded the small Bellanca at Chandler, and returned to camp. After 14 loads it was believed that all the parts, motor, final drive, transmission, and the like were ready for assembly. Swend A. Rasmussen, MM2c, was doing the job inside a Jamesway hut, with only a cook or radioman to assist him. It seemed an endless task to sort out the many bolts, and carefully rebuild the powerful little unit piece by piece. One of the arms had been lost at Chandler and a return trip was made. When Sig and "Ras" arrived and started the search, they found that two feet of snow had been blown over the lake, but a two-hour search was successful and the last of the parts was now available to be added. So after 15 trips by the small plane, preceded by four trips from Fairbanks in the large Boeing, an entire tractor had been flown to Umiat.

The accomplishments of the little D-2 are a testimony to its usefulness. It leveled and moved snow; it pulled a fully loaded Athey wagon—and in the doing appeared to be an ant pulling an elephant. It served as transportation—and on one occasion, while attempting to salvage some equipment farther down the Colville the D-2 was buried two feet below the level of the snow. Several of us had started down the bank of the river and slipped into a ravine covered with snow. After hours of futile shoveling Rasmussen drove the little cat straight down the snow-covered perpendicular bank of the big river. It was a tense moment, but rather than pitching forward it settled in the snow enough that the bank was navigated safely. After a six-hour reconnaissance trip it turned out to be quite an effort to get out of the river bed. Two men went about five miles down the river, then up a tributary and found a small bank with a minimum of brush and successfully got out. After the snow melted this turned out to be the one place for a good many miles that would have permitted passage.

On another occasion last spring the D-2 broke through the ice on the large lake and was out of sight. After working in icy water a line was attached and a D-8 from the sled trains winched it out.

At one time the D-2 was the only available transportation to Wildcat Junction, eight miles away across creeks, tundra and steep hills. The accomplishments of the invaluable little workhorse could never be enumerated fully. Rasmussen nursed it through its infancy, proudly showed it to the cat train arrivals—treasured its vigorous, active days—and was mothering it through premature senility when he left the Umiat camp.



The height of the Seabee-driven exploration program was the well drilled on top of a bleak mountain which overlooks the great Colville River in the Southeastern corner of the Reserve. This was the end of the line for the sled trains and the most inaccessible of our inland camps. The symbol of all exploratory work, a single drilling well stood defiantly here. Officers involved were: The Drilling Superintendent, C.W.O. W. H. Burgess, from California, who had relieved C.W.O. W. W. Smith earlier in the winter; Lt. J. W. Hugg, Petroleum Engineer, later joined by Lt. J. R. Coleman, who came up in May 1945; Mud Engineer was Lt. F. B. Williams; Schlumberger man, Ensign S. H. Folk; and Paleontologist, Lt. D. W. Jopling.

After having moved the bulky drilling equipment overland in the middle of the winter, with temperatures at 40° and 50° below zero and wind blowing constantly, the well was drilled in comparative warmth during the summer of 1945. Such men as Charles J. Scholz, H. G. "Mike" Wells, H. W. Kerr, and O. W. Le Gate did the rigging up, and with only a fraction of the aid from the use of heavy equipment which might be used in the States. Only the minimum equipment had been brought up the first year, for Capt. B. W. Gillespie had made certain that essential equipment would not be diverted from the war fronts. Other men who worked on the well included Tool Pusher, Chief J. E. Sheets; Drillers, O. W. Le Gate, Chiefs A. K. Wood and V. L. Barron. P. A. Cooper, Z. W. Burney, A. D. Barton, J. A. Cantwell, I. T. Gleason, G. D. Griffith, L. E. Hartsell, J. W. Hudman, L. H. Kemnitz, H. H. Kolb, A. S. Nichols, J. R. Roundtree, and L. S. Soisson made up the crews. J. F. Edmundson, Diesel Me-



LT. J. W. HUGG Petroleum Engineer



C.W.O. W. H. BURGESS Drilling Superintendent

chanic, and E. F. Earnshaw, Radioman and Electrician, were invaluable contributors. Joe Wallen, chief cook here, and one of the original draft, died during the summer's work. A good many additional men who came up this summer contributed in supporting roles and helped make this isolated spot famous as the renowned "Wildcat Junction."

The search for oil throughout the world has lured the adventurous on for decades, and this one tops them all. These men volunteered for this assignment. They were drillers, roustabouts, and roughnecks who have covered the mushrooming oil fields of the United States, and many, such as the Superintendent, W. H. Burgess, talked as familiarly of Arabia, Egypt, and Java, as most men do of Oklahoma and Texas. They were an extremely capable, rugged outfit. Averaging about 220 pounds per man, they would have been a football coach's dream, except for their ages. They were veterans all, and as such carried through one of the toughest assignments ever given a group of Seabees. The well was incredibly hard to drill; supplies trickled in, by shuttle plane service and such care was taken to extract the last ounce of information from the hole by the many specialists that half of the time was spent in coring, running Schlumberger and additional tests such as the Johnston formation tester and both the Eastman and Totco well-surveying instruments which an independent operator seldom ever reads about. The well was shut down by the loss of water supply early this fall, as the streams froze, but though just short of 2,000 feet, several favorable oil sands were encountered and assurance gained that the Reserve definitely contains many oil bearing stratas. This was our goal, our purpose in coming to the Arctic, and that goal has been achieved, that purpose fulfilled. The Reserve contains oil, the amounts and further locations will be decided in future years, but another great oil producing area has been opened to exploration and future development by N.C.B.D. 1058. The Director of the expedition, Capt. B. W. Gillespie, our Commanding Officer, Lt. Comdr. W. H. Rex, and every man who shared the exasperating job is proud of the successful climax to their year's work.

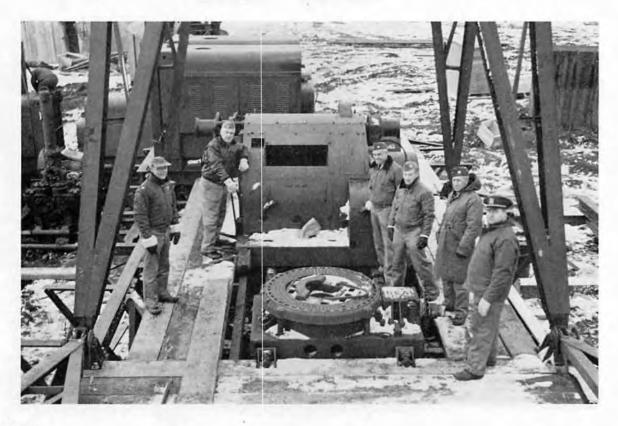




CHIEF T. O. FLETCHER, left, and W.O. W. W. SMITH, the first 1058 Drilling Superintendent.



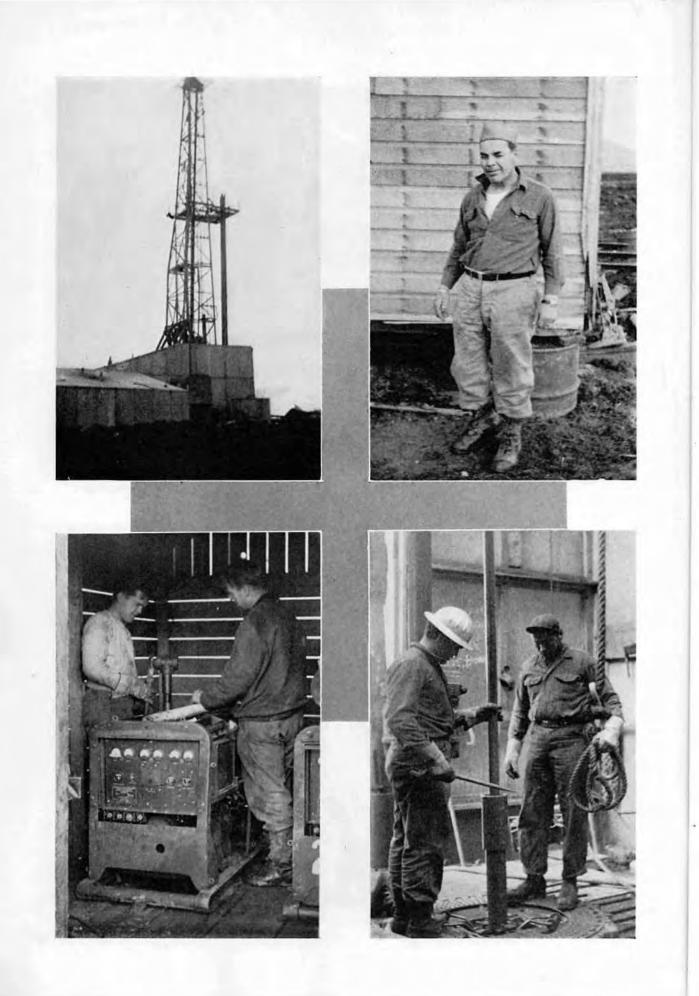
Oil crew personnel-(left to right)-C.W.O. W. H. BURGESS, FARRIS, FORTA, WOOD, PIESTER and WEBB.

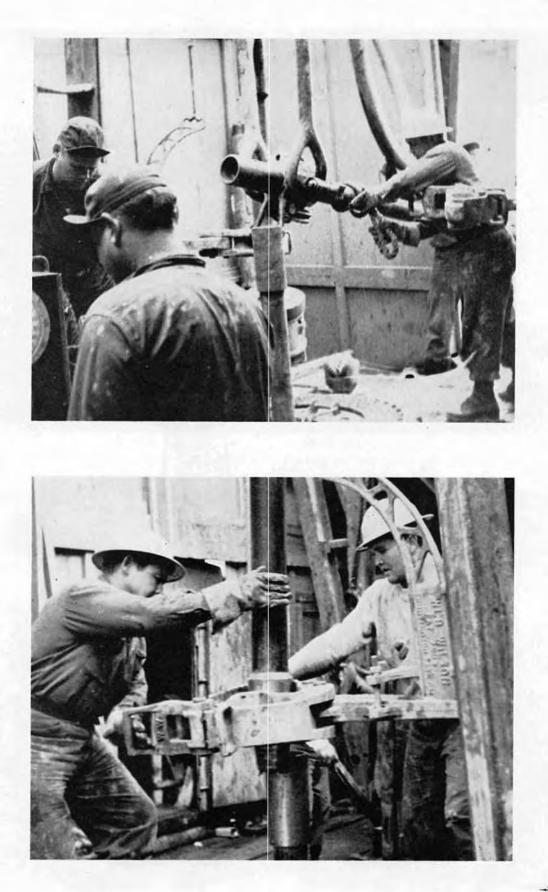


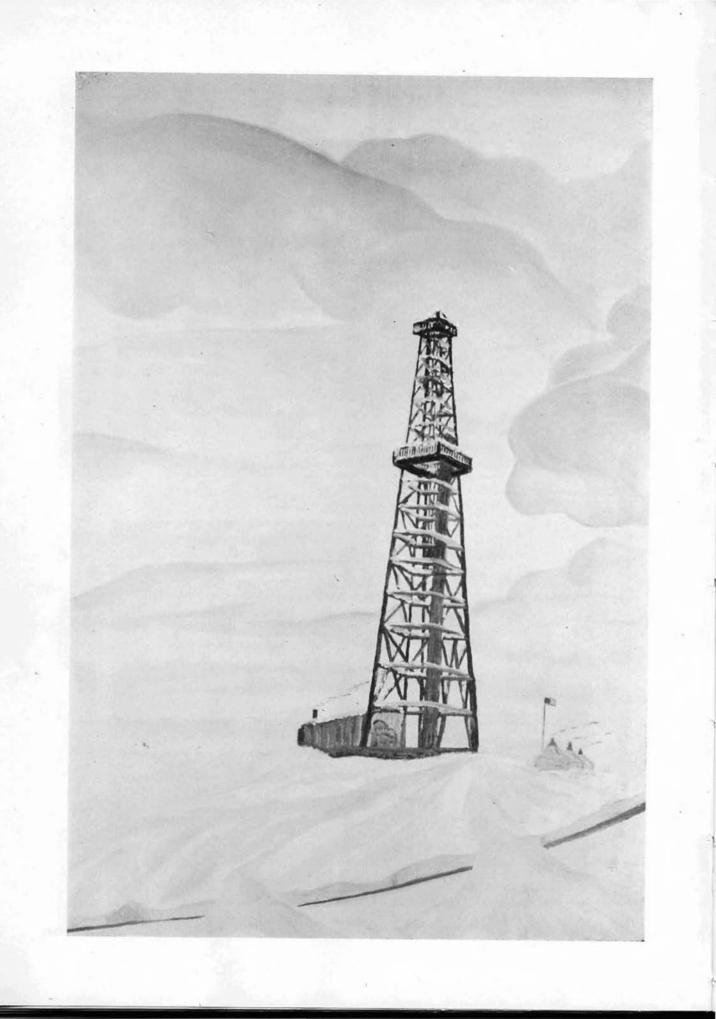












CONTRIBUTING PERSONNEL

So many contributed to the success of the Arctic endeavor it is a near Herculean task to undertake proper recognition for their services. However, the work and assistance of a few was so outstanding we wish to acknowledge it.

Assisting the Director of the Expedition, Capt. B. W. Gillespie, was Lt. Baxter Goodrich, CEC, USNR. Much of the early work of supplying the initial materials for shipment fell to him—and throughout the year his consistent effort on behalf of those at the end of the line was a major contribution.

Lt. (jg) Ralph Bell, CEC, USNR, expedited supplies all down the line and managed to make a lot of tough jobs look easy. And Chief H. J. Ziegler, attached to 1058, but stationed in Seattle, was often instrumental in facilitating rush shipments.

Lt. Comdr. Chris Wilson, CEC, USNR, had been the temporary Officer-in-Charge when the 1058 detachment traveled from Quoddy Village, Maine, to Tacoma, Washington. He later served as Liaison Officer between the Office of Captain Gillespie and the far north camp. Often he found it possible to perform special services for the Detachment and has spent a good many weeks in the Reserve.

The Director of the Alaska Division of the Bureau of Yards and Docks, (Diraldocks), is Rear Admiral C. A. Trexel, CEC, USN. His trips to our camp were regular features and his suggestions and observations were invaluable aids. Captain Verpillot, Lt. Comdr. P. D. Koon, and Lt. Jim Durden, and Lt. Jack Devers, in Admiral Trexel's office, assisted the operation time and again and our tour of duty would have been less successful and more difficult without their aid.

Admiral Ralph W. Wood, Commandant of the 17th Naval District, twice took time out from his central Aleutian Offices to pay brief calls at this outpost of Com17 surveillance. His ready summary of how cold he thought it was here has become a classic in descriptive phraseology.



"The old and the new."





NAMES OF 1058 OFFICERS

Original Officers:

REX, WILLIAM H., LT. COMDR., OINC ElDorado, Kansas BALDWIN, RICHARD G., LT. (JG) Berkeley, California BERLIN, LEONARD M., LT. Fairbanks, Alaska BURGESS, WESLEY H., C.W.O. Ojai, California CONNELLY, JAMES F., LT. (JG) Oklahoma City, Oklahoma CORBIN, HARRY F., JR., LT. Wichita, Kansas DELANEY, RALPH W., W.O. Ada, Oklahoma GILLEN, HUGH C., LT. (JG) Milwaukee, Wisconsin HAGESTAD, JOHN S., LT. Taft, California HITCHCOCK, ROY S., LT. Los Angeles, California HUGG, JAMES W., LT. Groesbeck, Texas

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COLEMAN, J. R., LT. Lufkin, Texas GLASHOW, ARNOLD L., LT.

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Hamilton, Robert Philipsburg, Pa.

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Manning, William H. 115 Sunset Terrace Laguna Beach, Calif.

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Perry, L. E. Seattle, Wash.

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Schuster, Bob Marshall, Mo.

Vroman, H. R. Cheyenne, Wyo.

Walling, Jack Reno, Nev.

Kellow, F. M.

Walthers, Ralph Omaha, Nebr.

NAMES OF MEN ON ORIGINAL PIPELINE SURVEY CREW, 1944

BERLIN, L. M., LT. DAUBEL, PAUL G., LT. (JG) Babcock, F. M. Galey, Leonard A. Givens, William P. Handley, Clarence D. Heath, Albert Hopper, Charles

Prosser, Harold Wedaman, Andrew C. West, Gordon W.

NAMES OF GEOLOGICAL SURVEY PERSONNEL

FORAN, WILLIAM T., LT. COMDR, Chief Geologist

BRAZIL, JAMES T., LT. CORTES, H. C., LT. FISHER, T. G., LT. HEINRICKS, W. E., ENSIGN JOPLING, DON W., LT. KREIDLER, W. L., LT. MCCONNELL, A. P., LT. (JG) PAYNE, M. B., LT. PHILLIPPI, W. H., JR., LT. ROGERS, J. A., LT. (JG) TAYLOR E. F., ENSIGN TEMPLETON, J. S., LT. (JG) WAYMAN, G. S., LT. (JG)

Additional Geological parties of the U.S. Geological Survey were in the field in the summer of 1945.

NAMES OF PERSONNEL OF THE SPECIAL ALASKAN MAGNETIC SURVEY (SPAMS)

VESSELL, F. G., LT. COMDR., OINC. Balsey, James Barton, D. F. Bizon, V. D. Boyette, D. W. Colley, G. W. HEADRICK, JAMES, LT. Jensen, Homer Kelly, E. G. MURPHY, PAUL, ENSIGN

PETERS, WILLIAM, LT. Rossman, Darwin STURM, HOWARD, LT. Walton, Matt WENGERD, SHERMAN, LT.

NAMES OF U.S. COAST AND GEODETIC SURVEY PERSONNEL

BOWIE, JOHN, JR., LT. COMDR. Fisher (Civilian) Hetherington, R. C. (Civilian) QUINN, LT. COMDR. RANDELL, WILLIAM, ENSIGN Sylor, N. E. (Civilian) Taylor, E. H. (Civilian) WOODWORTH, R. W., LT. COMBR.

NAMES OF GRAVITY METER MEN

FISK, F. K., LT. MCMILLAN, J. W., LT. (JG) MITCHELL, F. L., LT. RIEKE, H. W., LT. (JG)

SCHLUMBERGER MAN

FOLK, S. H., ENSIGN

NAMES OF SEISMOGRAPH MEN

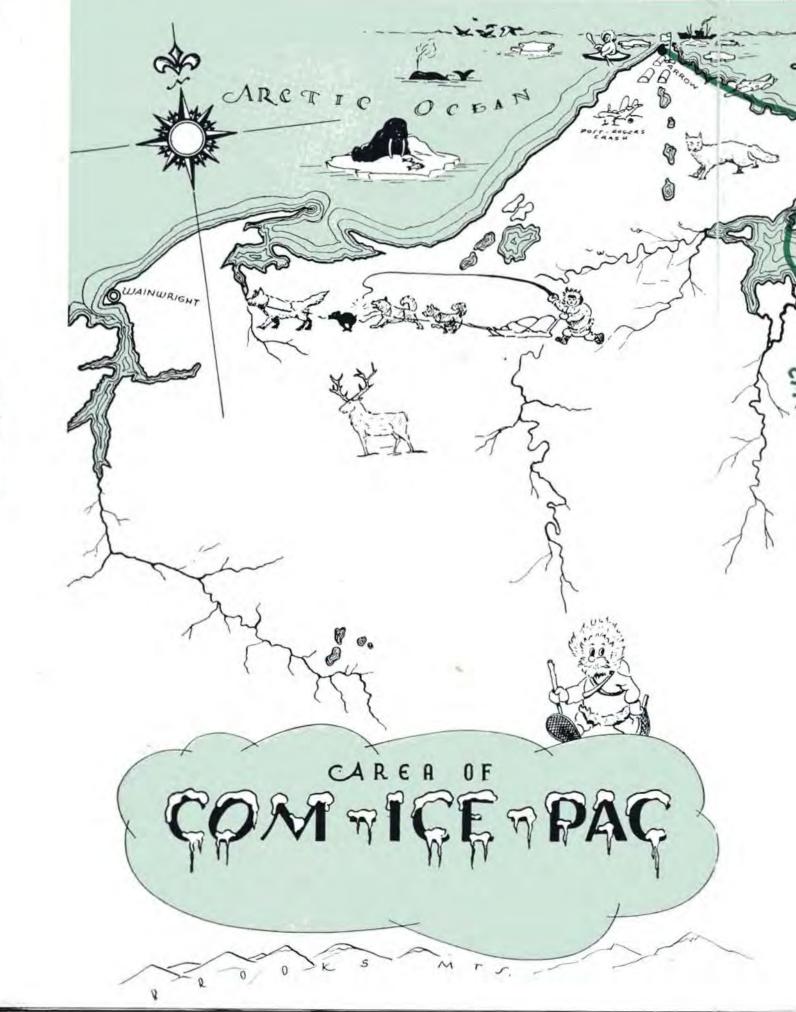
Nelson, E. N., Navy Technician Williams, R. J., Navy Technician Byars, G. H., Navy Technician Legge, J. A., Navy Technician MARTI, E. J., LT., Party Chief

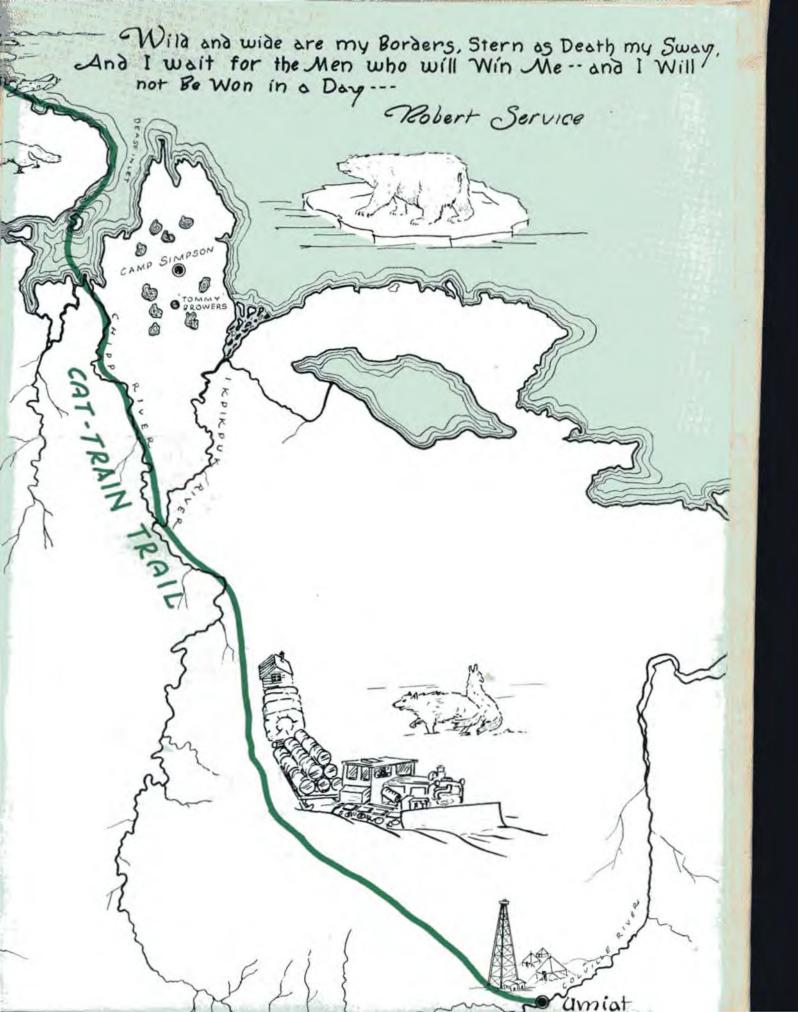
NAMES OF NAVY SEARCH AND RESCUE PERSONNEL

BRANHAM, E. G., LT. BLINE, ENSIGN SWAN, ENSIGN Rader, H. P. Reynolds, R. P. Additional Pilots: DEAN, LT. GALLIA, LT. MISKOFF, STEVE, LT.

NAMES OF ALASKAN SCOUTS

ACUFF, EARLE C., CAPT. RAU, G. J., CAPT. THOMPSON, BOB, CAPT. Anderson, Theron G. Bagley, E. R. Bates, W. B. Buck, D. M. Curtin, Andrew Dayo, Stanley J. Jacobsen, Severt Kelly, Joseph D. Mencke Picken, James F. Ruef, G. F. Spaulding, D. O. Sparks, H. Stefanski, S. J. Trefon, Pete Windleman, A. E. Young, M. B.









SEABLES AT POINT BARROW Members of the 1058th Detachment setting up the core hole rig for test hole No. 1

totaled 4800 square feet, all of which was in winterized tents.

Aviation facilities included a parking area for two planes and a motor-test shop, also in a winterized tent.

Administration offices were located in three temporary buildings with a total floor area of 2310 square feet. A radio unit was installed in the operations building. Hospital facilities consisted of eight beds.

Station maintenance, including a garage, a laundry, and shops, occupied five buildings with a total area of 2340 square feet. Power was furnished by a single 75-kw diesel-electric generator.

Aviation gasoline, land-plane facilities of all types, radar and radio stations, and other necessities were furnished by the Army. On V-J day the

facility was still operating under the control of the Attu naval base.

Point Barrow Sector

In the spring of 1944, exploration operations were undertaken to determine the petroleum-producing potentialities of Naval Petroleum Reserve Number Four at Point Barrow, Alaska. This reserve, 35,000 square miles in area, had been established by Executive Order on February 27, 1923.

Point Barrow, the northernmost tip of the North American continent, lies at approximately 71 degrees North Latitude and 156 degrees West Longitude.

On March 21, 1944, the Bureau of Yards and Docks, on instructions from the Secretary of the Navy, sent a reconnaissance party of four officers into the reserve for investigations concerning the various problems which would be encountered if a drilling program were to be undertaken. In June 1944, two officers and five enlisted men were flown which had been selected as the site for the first test well.

The second phase of the mission proved most difficult. This involved the tractor-train operations



A POINT BARROW SUPPLY TRAIN Seables use a D-8 to haul supplies to Umiat, February 1945

to Barrow to make surveys on which to base the choice of drilling locations.

In August 1944, Seabee Detachment 1058, a petroleum unit consisting of 181 men and 15 officers, debarked at Barrow with 8000 tons of drilling and arctic equipment. The detachment carried sufficient supplies to maintain operations without reinforcement for a 12-month period. Contact with the unit was maintained by plane and radio. Work was begun immediately on the erection of a camp for shelter and construction of an airstrip for Naval Air Transport Service, which was to serve serve the operation.

The operation during the first year consisted primarily of the surface geological work, the coring operations throughout the reserve, and the drilling of test wells.

The crux of the petroleum exploration problem in the Arctic region was transportation, primarily tractor train and air. Adequate air support was essential. High priority was given to the construction of the airstrip at Barrow and to the planning of a second strip at Umiat, on the Coleville River, over the 330 miles of snow and ice from Barrow to Umiat. The expedition had arrived at Barrow during mid-summer in order to take advantage of the fact that the port would be free of ice. Mapping of the roadless, trackless wilderness between Barrow and Umiat revealed that many streams and swamps had to be crossed. This could be accomplished only when the ground was frozen and the ice thick enough to support the tractors and the sled-loads of heavy equipment. Hence, the movement to Umiat could not begin until January 1945.

The first tractor train carried a cargo of airfieldconstruction equipment, a dragline, two pans, a grader, and accessory equipment, as well as food and miscellaneous supplies and fuel. The train consisted of four tractors with a bulldozer in front and twenty bobsleds behind. By means of house sleds, called wannigans, travel was able to be continued, day and night, without interruption. The wannigans were used as living quarters, portable machine shops, radio stations, mess shacks, and provision storehouses. A snow jeep preceded the train; difficult crossings were examined by Army scouts on dog sleds; and an air-jeep constantly guarded the train. Radio communications were maintained with the various units of the train, Point Barrow, and Umiat.

After completion of the first trip, the tractors and one wannigan returned to Barrow to begin carrying in the heavier pieces of drilling equipment, and as much fuel as was practicable for the construction of the airfield. By June, three trips had been made between Barrow and Umiat. For the thousand miles covered the average speed was only slightly more than one mile an hour.

During the summer of 1945, the well at Umiat was drilled to a depth of 1,816 feet. At the same time, construction of an airstrip was begun. Extensive reconnaissance surveys were made to determine the route for a proposed pipe line from Umiat to Fairbanks, and preparations were made to shift the scene of operations to a new location following the completion of drilling operations at Umiat.

Geological and geophysical investigations continued to be carried on at Umiat and Simpson, and an additional 17,000 tons of equipment and supplies were unloaded at Barrow.

On January 13, 1945, NATS was directed by the Chief of Naval Operations to provide air support of the expedition both to and within the reserve. By March, the back log of air cargo at Fairbanks had been completely eliminated. A great deal of light-plane service within the reserve was required for support of Umiat and Simpson, of the tractor trains to Umiat, for ice patrol, and the support of the several geological parties. Two commercial planes furnished light-plane support by flying fuel and supplies to a radio aid station at Umiat.

V-J Day, however, and its accompanying demobilization program made necessary a shift from the use of military personnel to employment of civilian contractors.

CBD 1058 was inactivated on March 1, 1946, and three civilian companies were selected to continue the explorations, merged under the title of Arctic Contractors. Future operations were to be carried out under a civilian contract which was to cost \$2,125,000. The Scabee camp site and all naval equipment and materials connected with the operation were inventoried, given a computed value of \$1,175,000, and turned over to the contractors.

The Director of Naval Petroleum Reserves was given general cognizance of naval petroleum reserves under the Secretary of the Navy, and was to define the scope of the exploratory program.



WEASEL USED BY THE POINT BARROW EXPEDITION