



Snowbird II unloading at Cambridge Bay, 25 August 1948.

THE VOYAGE OF THE "SNOWBIRD II"

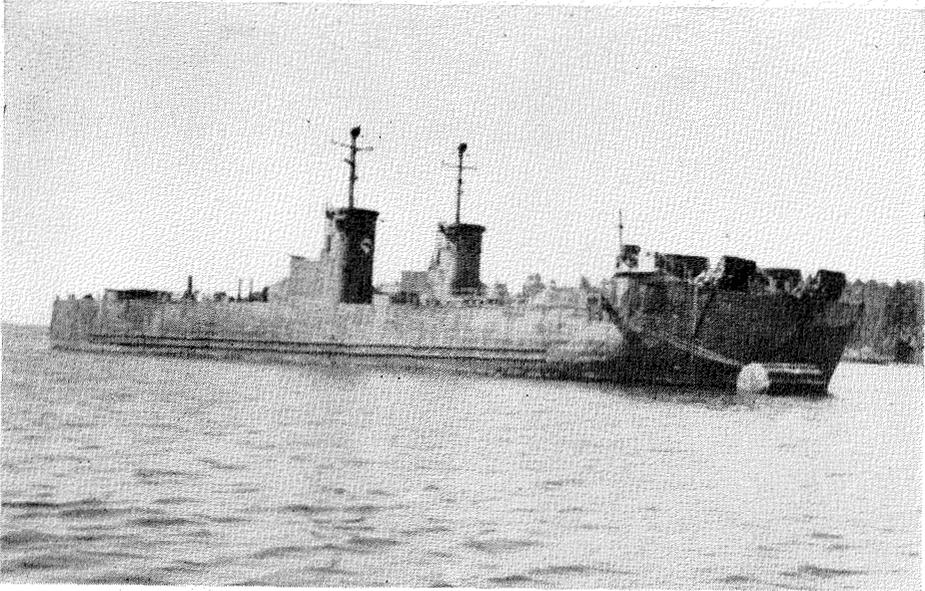
By F/L S. E. Alexander, R.C.A.F.

THE arctic trip of the *Snowbird II* in 1948 had its origin in 1935 when Messrs Watson, Purcell and Storr, three trappers, sailed from Vancouver, in a ship called the *Audrey B*. The *Audrey B* had been modelled after the submarine chasers of World War I and had operated as a rum-runner. Judged from an orthodox point of view she was scarcely suited for arctic waters, yet the three men used her for four navigation seasons in the waters of the Beaufort Sea, Coronation Gulf and Bathurst Inlet. They reasoned, against experienced advice, that a ship of shallow draft and plenty of speed need never be subject to the dangers of the polar pack.

The *Audrey B* not only arrived at her destination safely but broke all records for speedy trips along the Arctic coast. In 1937 she survived one of the worst ice years, while the Hudson's Bay Company's ship *Fort James* was crushed in the pack and lost in Dolphin and Union Strait, near Cape Bexley, and the R.C.M.P. vessel *St. Roch* was so severely strained by ice pressure that she had to be taken to Vancouver for repairs. The *Audrey B* closed her career north of the Arctic Circle when war broke out and she was sold in Vancouver, where she is now being employed as a fish-packer. There have been many arguments over the operation of this ship in the polar seas. Most arctic skippers attributed her success to luck, even though she had been safely navigated for four seasons.

It was this success of the *Audrey B* that led to the recent trip of the *Snowbird II*. The supplying of the R.C.A.F. Detachment at Cambridge Bay had become very costly by the spring of 1948. All freight had been supplied by air up to that time and it required five gallons of aviation gas to land one gallon of fuel oil at the base. The Air Force therefore decided that freight would have to be taken in by water and tenders were called for. Mr. Earl Harcourt, President of the Yellowknife Transportation Company of Edmonton, Alberta, offered the most acceptable plan and tender, but there was some opposition to his scheme from experts on arctic navigation. Harcourt had never been on the Arctic coast but had been in the transportation business for seventeen years, operating throughout the Mackenzie River system. He had heard of the successful career of the *Audrey B*, and was convinced that this performance could be repeated.

Harcourt chose a war veteran for the second attempt in the arctic to carry freight in a very shallow craft. The *Snowbird II*, a United States Navy Landing Ship Medium, had seen service in the war against Japan. Many of the specialized war-time features of a Landing Ship proved to be of particular value for work in the Western Arctic. For example the exceptionally shallow draft for landing vehicles enabled the ship to

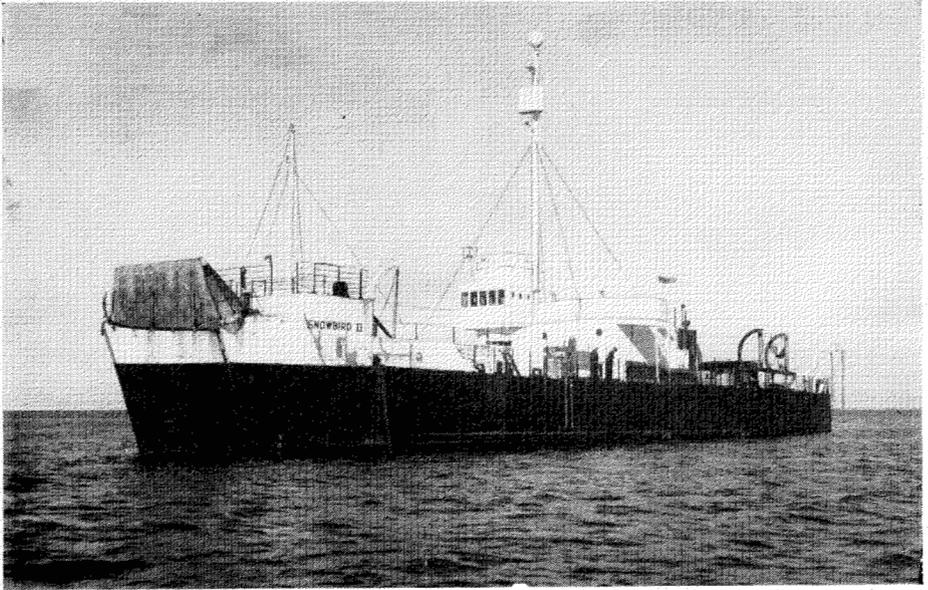


Snowbird II before conversion: in Victoria Harbour, 1 June 1948.

approach close inshore in the shallow coastal waters. The reinforced bottom, for crash-landing on any type of beach, and freight doors for beach-landings proved their worth in a region of few harbours or harbour facilities. The long-range necessary in war made it possible to cover the great distances of the Western Arctic, and her speed and direct reversible engines were a safeguard against ice. When she was bought for her northern trip the *Snowbird II* was practically derelict. One of the outstanding features of the *Snowbird* operation was the conversion of the ship from a powerless, barnacled hulk to a trim seaworthy ship in the short space of six weeks.

For his top deck crew Harcourt chose four men with skipper's tickets, three of whom had had arctic experience. The Captain of the ship, F. L. Coe, was a skipper of outstanding record, having sailed before the mast and operated along the Siberian Coast when the Hudson's Bay Company's trading territory extended into Russia. The R.C.A.F. sent the writer as official observer as he had spent six navigation seasons in arctic waters and was familiar with the entire route; they also offered to provide air reconnaissance when needed.

Snowbird II has a gross tonnage of 1158, is 203 feet in length, has a 34-foot beam and a draft of $10\frac{1}{2}$ feet loaded. She is therefore considerably larger than the *Audrey B* which is 109 feet in length, has a $20\frac{1}{2}$ -foot beam and a draft of $8\frac{1}{2}$ feet. The *Snowbird II* is powered by twin 1800 h.p. Fairbanks Morse Diesel engines. For northern work her hull was specially reinforced with a half-inch welded steel ice-protection skin,



Snowbird II after conversion: at Point Barrow.

extending from the ramp entrance along port and starboard sides and around the stern. She was also equipped with two standard compasses, two Sperry gyro compasses, radar, direction finder and an automatic fathometer sounding device. On her first trip north she carried a crew of 18.

In spite of several set-backs the ship cleared Vancouver at 3.15 p.m. on July 27 with a cargo of approximately 850 tons bound for Cambridge Bay, Victoria Island, N.W.T. The writer became the radio operator, for none was carried to operate the 350/250 watt RCA radio telephone transmitter.

Sailing up the Strait of Georgia, and pausing briefly for the tide at Seymour Narrows, the ship continued through the beautiful Inside Passage along the British Columbia coast and reached Prince Rupert on the second day. Here fuel, lubricating oil and fresh water were taken on, and a speedy departure made the following morning. By the time Triple Light, on the north side of the Queen Charlotte Islands, was cleared, the Pacific crossing to the Aleutian Islands was well underway. From August 1 to August 3 the ship was forced to proceed at reduced speed owing to a tendency to pound in heavy head-seas, but a fast trip was made to Dutch Harbour, arriving on August 6.

The active volcano on Akutan Island was plainly visible as *Snowbird II* sailed up Unimak Pass, and large clouds of black smoke puffed out in a spectacular manner about every ten minutes. The ship remained at Unalaska Island, making minor engine repairs and adjustments at Dutch

Harbour and Unalaska, and taking on fresh water and fuel as these were the last bases where this could be done before proceeding north. Just after departure on August 8 a seized air-brake on the port propeller shaft delayed the ship overnight, but she was able to leave the next day. The

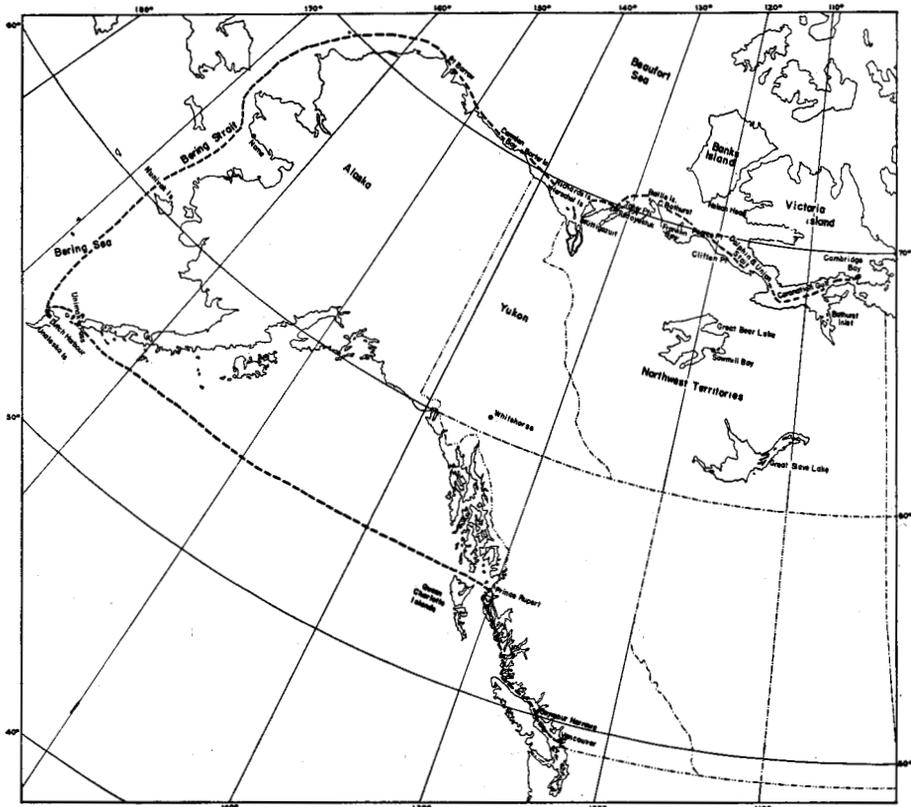


Fig. 1. Track of the *Snowbird II*.

weather was clear and mild with no winds and the Bering Sea was at its best with as many as twenty whales in sight when passing Nunivak Island and huge flocks of black brant flying overhead. Fur seal were in abundance, skipping in and out of the water, and some hair seal were seen swimming in a very lethargic manner compared with their agile cousins.

Radio contact had been kept with Vancouver Airways, 12 Group HQ; then Whitehorse; Dutch Harbour; Marks Airways, Nome, Alaska, and then a condenser burnt out on the transmitter. A search of the spare radio parts revealed that no correct replacement was available, but with the help of the ship's electrician two heavy duty condensers were connected in series to give the required resistance.

The *Snowbird II* first encountered ice late on the evening of August 12. The floes were heavy but scattered, and the ship had no difficulty

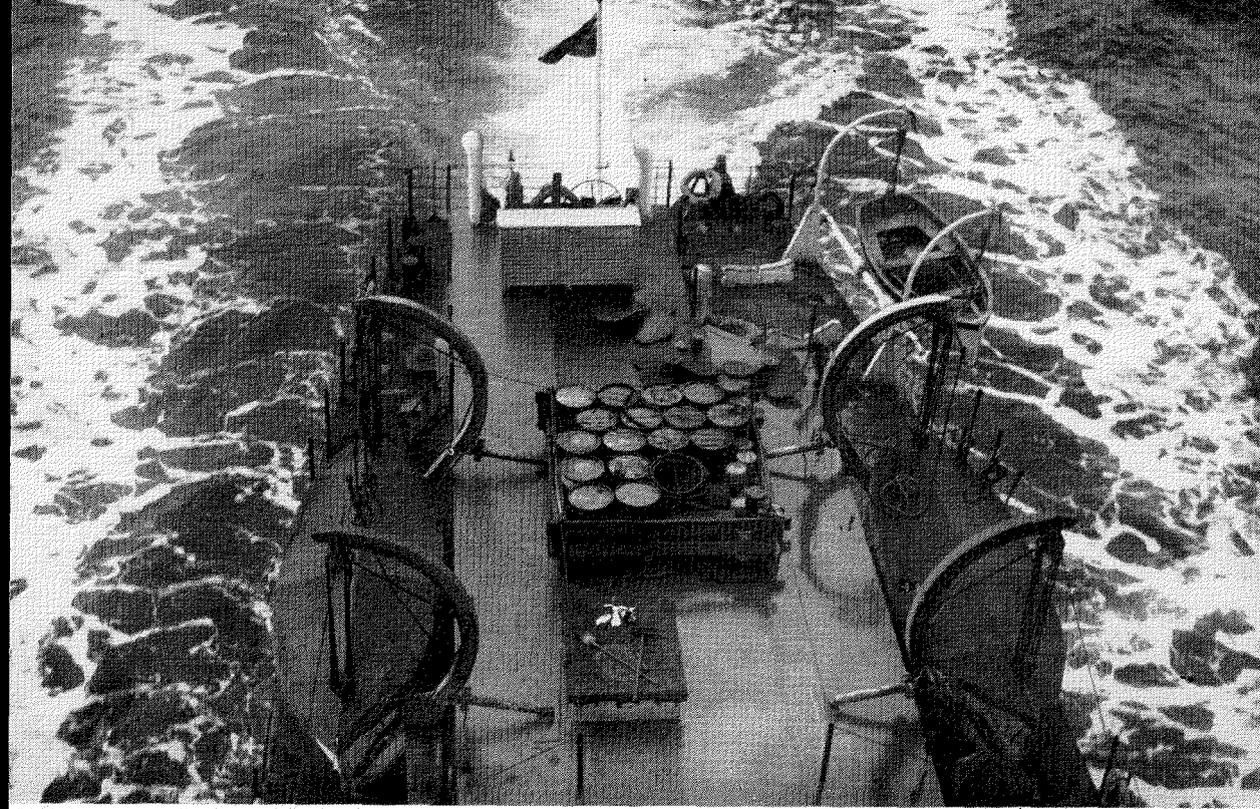
threading a passage through to Point Barrow, where she dropped anchor early the following morning.

Detailed ice information as far east as Barter Island was available from Commander J. Backlund, U.S.N. Staff Ice Pilot for the Point Barrow Supply Expedition. It was therefore decided that the *Snowbird II* should leave that afternoon to pit her speed and shallow draft against the Arctic pack. Shortly after leaving Point Barrow a heavy fog closed in and a Canso plane of the R.C.A.F., which was sent to provide air reconnaissance, had to make for Point Barrow. On August 14 the Canso returned and gave the *Snowbird II* the ice conditions to Camden Bay. Heavy ice lay close inshore all the way from the Colville River to Barter Island, and many times the ship was in 12 feet of water or less. Owing to the information supplied by the Canso *Snowbird II* managed to reach Barter Island on the third day, although she twice touched bottom. Had she drawn another six inches of water it might have been a different story.

Shortly after leaving Barter Island, the Canso informed *Snowbird II* that an open lead lay about ten miles out while ahead there was heavy ice. Course was altered accordingly and soon the ship was proceeding in open water at full speed. The Canso made another reconnaissance on August 16 and reported all clear to Tuktoyaktuk (Port Brabant) before returning to its home base at Edmonton. Difficulties were experienced the next morning when *Snowbird II* came too close to Richards Islands, but Tuktoyaktuk was reached that night. The river boat *MV Sandy Jane* of the Yellowknife Transportation Company arrived later that night with Mr. Harcourt aboard, who joined *Snowbird II* for the trip to Cambridge Bay. Approximately 100 tons of freight were loaded, and the ship left for Cambridge Bay on August 20. Clear sailing was experienced on the run east. Ice was first met off Cape Bathurst where it was easily skirted and loose floes from there to Pearce Point made an ideal playground for numerous whales. Cambridge Bay welcomed the ship four days later.

All off-duty members of the Service personnel helped the crew to unload the 950 tons of freight in only three days. It was however quite a difficult problem as there were no proper facilities and the frozen base of the road was thawing and broke up rapidly under the weight of tractors. Here the *Snowbird II* definitely proved her worth as an Arctic freighter. Within one hour she was beached by the head, freight doors open, ramp down and unloading was in progress. All the difficulties met with in unloading a more orthodox freighter, such as finding a secure anchorage, waiting for an almost windless day, and the need to use barges were dispensed with.

Early on the morning of the 28th *Snowbird II* cleared Cambridge Bay for Tuktoyaktuk in an attempt to bring another full load in the same season. The nights were lengthening fast and it was necessary to proceed



Snowbird II en route to Cambridge Bay.

very slowly in the dark hours, but on the following day the *Snowbird II* passed the H.B.C. motor vessel *Fort Ross* at noon, and Clifton Point that evening. Ice was encountered during the morning of the 30th and increased in heaviness so that further progress to the west was impossible. A course was therefore laid to the north in an attempt to sail round the pack. When the ship was about thirty miles from Nelson Head on Banks Island it became obvious that speed was not going to get her through and that her second feature, her shallow draft, would have to be utilized. The *Snowbird II* then headed south in an attempt to sail inside the pack round the shallow coast of Franklin Bay.

Radio contact was maintained with Cambridge Bay, Kittigazuit and Sawmill Bay, and one night the radio operator spoke to Fort Nelson and Churchill. On the 31st, just after sighting the Smoking Mountains east of Cape Bathurst, the R.C.M.P. schooner *St. Roch* was contacted by radio. In company with the H.B.C. M.V. *Fort Ross* and the Roman Catholic Mission schooner *Lady of Lourdes*, she was lying inside the ice, 25 miles to the south off the Horton River, in Franklin Bay. The *St. Roch* reported a lead along the shore and an attempt was made to work through loose ice to the south or west to join these ships. By nightfall a scattered fog, which prevailed all day, became quite heavy and a hasty retreat was made to the east as the ice began to close in. Early the next morning the fog cleared and the ice had slacked off sufficiently for the *Snowbird II* to make fast speed towards Cape Bathurst. The *St. Roch* reported that

both the *Fort Ross* and herself had passed Baillie Island without difficulty by following a shore lead. A Canso at Kittigazuit made a run out to the *Snowbird II* and reported the way clear to Tuktoyaktuk.

Proceeding to Tuktoyaktuk *Snowbird II* ran aground on a sand-bar off Cape Brown. Fortunately Mr. Harcourt, who is a river skipper, had frequently dealt with similar situations in the past, and the ship was freed early the following day and anchored at Tuktoyaktuk that night. Meanwhile the *Fort Ross* had anchored off Toker Point the previous night, the *St. Roch* was headed for Herschel Island and the *Lady of Lourdes* had already reached Tuktoyaktuk.

Loading the *Snowbird II* began on September 4 and about noon the river boat *Saline* of the Yellowknife Transportation Company arrived from Kittigazuit with 19 barrels of lubricating oil for *Snowbird II*. The next day being Sunday the natives were attending local church services and very little loading was done. On the Monday the writer and a native, Thomas Omuk, sailed down the coast in an open whale boat to Kittigazuit to meet Squadron-Leader Gooderham, the commanding officer of the R.C.A.F. base. The return trip the same night was somewhat crowded as a native, his wife, four children, and nine dogs plus household effects wanted a ride to Tuktoyaktuk.

Snowbird II finished loading on the 10th, and left early the following morning for Cambridge Bay. Air cover was provided that night and by the next morning she had reached Cape Bathurst, moving through loose ice. On September 13 she was again in heavy ice, but on the 14th an R.C.A.F. Canso reported loose ice ahead and no ice for 65 miles east of Pearce Point. *Snowbird II* reached Cambridge Bay safely on September 17 and Captain Coe was informed that east winds which had been blowing almost constantly since his departure would drive the ice offshore and make a return trip to Tuktoyaktuk possible. However the season was far advanced and Captain Coe decided to winter the *Snowbird II* at Cambridge Bay. Meanwhile the *St. Roch* had managed to reach Herschel Island and was headed for Vancouver, and the *Fort Ross* and the *Lady of Lourdes* were laid up for the winter at Tuktoyaktuk.

The writer, who had been with the *Snowbird II* since it left Vancouver, had been instructed to remain at Tuktoyaktuk instead of continuing to Cambridge Bay as the last aeroplane for Edmonton was scheduled for the 15th. The next days were spent taking an inventory and arranging the storage of the remaining freight for the winter. On September 21 a Canso aircraft picked up the writer and the Yellowknife Transportation Company's loading crew of six and flew them back to Edmonton. The crew of the *Snowbird II* were later taken out from Cambridge Bay by air and the 1948 season was completed. This summer it is hoped that the *Snowbird II* will continue her successful career in arctic waters.