

Resolute staffed by meteorologists for 35 years

by John McBride

For 35 continuous years the Canadian government has staffed a weather station at Resolute, N.W.T. From the establishment of the Joint Arctic Weather Stations (JAWS) until just last year, it was the practice to staff the Officer-in-Charge (OIC) position with a meteorologist. Then, on September 26, 1981 AES Central Region began rotating senior meteorological technicians through the OIC position at Resolute on short-term postings of three to four months. Almost 60 meteorologists have served in Resolute and their contributions to aviation, marine transportation and other activities in the Queen Elizabeth Islands must be saluted and significant moments in their High Arctic service recalled.

Resolute, located on Cornwallis Island facing the Northwest Passage (about 2500 km north of Winnipeg), is one of the few inhabited sites in the Queen Elizabeth Islands, home of such Arctic animals as polar bears, musk oxen, lemmings and caribou, as well as of many birds. There are four old Inuit village sites near Resolute and indications that in past centuries there must have been a considerable population. Temporary visitors have included British naval expeditions in search of the Northwest Passage, Norwegian explorers, North Pole adventurers, Greenlanders on hunting trips and Canadian government officials.

Five weather stations — Resolute, Eureka, Isachsen, Mould Bay and Alert (the JAWS) were established on the islands after World War II. When heavy ice prevented an icebreaker and supply ship from entering Winter Harbour on Melville Island, two years supplies and equipment were landed in Resolute Bay along with 16 men on August 31, 1947.

Meteorologist Bill Ray was part of the team, and his tour of duty was two years. Why two years at such an isolated site? Stu Dewar who replaced him in 1949 says: "The job was deemed difficult, complex, requiring diplomatic skills with staff and visiting dignitaries



Cliff Hannah (left) is the senior met tech who replaced Steve Ricketts, the last meteorologist to serve as OIC Resolute Weather Office on September 26, 1981. They are seen together in front of the briefing display.

from Ottawa and Washington as well as continuance of scientific programs and managing the station. It was felt that the OIC might achieve efficiency of operation the first year, but that the second year would be a "piece of cake" and HQ staff could rest more easily." Although a policy change was not implemented until 1952, few meteorologists served as OIC longer than a year.

Airport was 2 km gravel strip

The first years were characterized by construction and lots of flights. The original Upper Air Weather Station was established at "South Camp" in September 1947. Stu reports that many improvements were made to existing buildings during his tour of duty. A new power house was built, a new 'hotel' was erected and several Jamesway and Quonset huts removed. The Upper Air Station was moved several times while Charlie Goodbrand and Mike Webb were OICs and the latter recalls changes in Resolute operations: "Construction was completed in October 1963 of a spacious, new building and separate in-

flation shelter for the upper air station at "Mid Camp" about two km south of the airport base. The ozone observatory was re-located on the second floor of the operations building. The aerologists were pleased with their new facilities, though at first they were a little apprehensive about the remoteness. Transportation was by truck or "Bombardier" ski-track vehicle along a gravel road marked by 200 litre oil drums."

Despite its extreme isolation, the Resolute weather station had some "neighbours". The Dept. of Energy, Mines and Resources ran a base near "South Camp" doing ionospheric research and other scientific programs. Stevedores arriving to offload bulk cargo from ships during summer resupply stayed at "South Camp". The Resolute airstrip, situated about five km north of the weather station was built in 1949 and originally maintained by the RCAF as a 2 km gravel strip. While piston-engined transport aircraft restocked the JAWS with fuel, food and equipment each spring, several meteorologists such as Bill Markham, Don Storr, Fred Burbridge and Horace Wilson served as forecasters at RCAF base. Then in 1953 Inuit from Pond Inlet (in northern Baffin Island) and Inoucdjouac on eastern Hudson Bay were uprooted and transported to Resolute to occupy a single row of tiny wooden houses set along the beach two km west of "South Camp".

OIC had many duties

The life of the meteorologist/OIC was busy. Following the sealift, there were forecasts to prepare for the fall airlifts to Mould Bay and Isachsen Polar Continental Shelf Projects on many islands would be ended for another season and expeditions would strike camp and head south. Messages flowed in a steady stream from weather stations reporting damaged or missing supplies. Spares and replacements had to be ordered from the south and they had to be flown in before the end of October when the Polar night ended almost all flying until the follow-

ing March. Throughout the winter there was a weekly RCAF flight into Resolute, on to Alert via Thule and back. Weather en route and frequent mechanical breakdowns kept the forecaster busy most of the week. Since Resolute was near the Magnetic North Pole, reception of facsimile charts from Edmonton was poor. Mike Webb comments; "facsimile reception was often better from Orly, Paris than Edmonton."

January and February were usually quiet months. However, in 1950, long before the sun first appeared at noon on February 7, a USAF C-54 piloted by Col. Burt Balchen, touched down in Resolute. The crew were royally received by all station staff and stayed for dinner and overnight rest.

There were administrative matters to attend to and mail to be handled (the OIC was also the postmaster). Fortunately, he rarely had to exercise his duties as justice of peace or as customs adjudicator. The OIC maintained daily liaison with the RCAF base commander and with weather stations via weekly ham radio contacts. As soon as light returned in March, flights were made by C-47 Dakotas on skis or Otters using oversize wheels, dropping 200 litre fuel drums in preparation for summer expeditions.

The spring airlift in early April was

also very busy until in 1969 monthly flights to the JAWS began and there was less activity during the spring and fall airlifts. By late April expeditions would arrive and construction would begin requiring aviation forecasts around the clock. In the sixties and seventies it was common for a second forecaster to serve a short term assisting the OIC during peak periods. John Mulvenna was the first of these in Resolute, assisting Hugh McRuer in the summer of 1969.

Occasionally there were requirements for special forecasts; for the RCMP who used to travel by sled and dog team overland from Resolute to Grise Fjord; and for the RCAF when they ran an Arctic Survival school at Crystal City nearby.

The RCAF Central Navigation School arrived each spring from Winnipeg and for over a week, crews navigated to every part of the Queen Elizabeth Islands, including flights to the North Pole and back. The North Star aircraft never shut down — it was simply refuelled and supplied with a fresh crew. Parachute airdrops were arranged before Christmas over Mould Bay, Isachsen and Eureka. Emergencies and medical evacuations were not uncommon. In the fall of 1961, an Inuit youth was accidentally shot when a bullet from a .22 rifle bounced off some stones and entered his abdomen. A C130 Hercules

with skis arrived from Thule and a green-clad medical team raced to the patient. As I recall them by the bed of the startled Inuit boy, I felt I was watching a scene from TV's 'MASH'. The boy received excellent medical treatment in Thule and when he returned weeks later dressed in an RCMP outfit, he was the village hero.

Resolute has had its share of severe and difficult weather to predict: winter blizzards, wind gusts, turbulence and low stratus. "The worst blizzard I have ever experienced," said Jack McCabe "was on November 11, 1965, when the anemometer needle stayed at 140 km/h for hours. The airport manager confined everyone to barracks except radio operators, Met. Techs and essential maintenance men. When visibility hit zero, a lifeline was strung between the barracks and the operations building." Snowfall in Resolute is light compared to Southern Canada, but high winds drive snow crystals against buildings which can easily be buried in concrete-like snowdrifts.

Programs required extra forecasters

Besides his forecasting duties, the OIC assisted by the U.S. Weather Bureau officer, managed the upper air and surface observing programs and participated in special JAWS programs. Jack McCabe enjoyed taking weekly sea ice thickness measurements with the U.S. officer. He adds, "It was a five km trip to the beach and a one km walk on the ice even in the coldest weather (down to -50°C). We took as many Met. Techs as we could muster for the trip in the Bombardier to do the drilling." The sea ice was often two metres thick. The ozone program began in Resolute in 1958 and OIC's made ozone observations until upper air technicians took over.

Around 1957, Meteorological Branch started an ice reconnaissance/forecast program. By the mid-sixties it was usual for four or five ice observers with a specially equipped chartered aircraft to come on station during August-September. In the early years ice forecasters such as Dick Hill, Art Cooper or Mike Burslem would do ice forecasting in the Resolute area. However, direct contact with ships was limited so these assignments were soon discontinued.



The runway at Resolute has improved considerably since the early gravel strip days.

There were always dignitaries, scientists, government officials and "VIPS" visiting Resolute. The first women were two army nurses from Fort Churchill who visited Cornwallis Island in August 1950 and were written up in the *Montreal Star*. That same month saw the tragic death of U.S. Colonel Hubbard, instigator of the JAWS stations, and the entire RCAF crew in the crash of an RCAF Lancaster at Alert. Roy Woodrew recalls that, in 1960, Judge Jack Sissons arrived from Yellowknife on circuit and a High Court session was held in the schoolhouse. It was a colorful ceremony because the magistrate wore his robes, the RCMP constable his scarlet uniform and flags were displayed. Frequently the OIC was able to join visitors on flights to the JAWS, and expedition bases; and occasionally he could board a flight to Thule, Greenland for a brief visit to the weather station and the Danish aeradio station there.

OICs did not have much time for leisure and recreation. Nevertheless, they could go for long walks, curl, fish, read, play cards, photograph nature, do photo processing, spend time on ham radio, attempting to ski, tinkering with electronic equipment or doing handicrafts in the RCAF hobby shop. I myself dared become a member of the polar bear club by having a chilling dip in Resolute Bay. One feature of the early days was a small outdoor sauna built by an ingenious Finn using wooden packing cases. The interior was large enough to take three as Stu Dewar, Horace Wilson and Bill Markham discovered in April, 1951. After a suitable time in the 'oven', one experienced the thrill of towel drying outdoors at -30°C in nothing but shoes, yet not feeling cold, (only realizing one's hair had frozen solid!).

Change was inevitable

Resolute is essentially a government complex. Change is normal. Mike Webb says: "The second significant event in my tour was the departure of the RCAF as custodians of the base and airport and hence the end of the RCAF station. Their 60 men were pleased to head south as Resolute became the responsibility of the Dept. of Transport before Christmas under an airport manager with station maintenance provided by commercial contract. All RCAF facilities were turned over to DOT. In retrospect Mike says

the most significant event was the drilling of a test oil well east of "South Camp". Although abandoned, it foretold a new era for the Canadian Arctic.

The period of 1960-1975 saw steady growth in exploration activities in the western Arctic Islands, so much so that a second forecaster was often sent to assist the OIC in summer. In 1972, after 25 years involvement in joint programs, U.S. personnel left Resolute. The Inuit were moved to a new settlement east of "South Camp" and there were plans for a large, modern complex to be built around the settlement. It was never completed due to lack of funds. Resolute is almost certain to expand rapidly when year-round marine transportation becomes a reality.

When meteorologist Steve Ricketts left Resolute on September 26, 1981, he was replaced by a senior qualified Meteorological Technician, Cliff Hannah. To mark this change in staffing level, a list of all meteorologists who served in Resolute as OICs, for re-supply, during the summer, or as ice forecasters, was prepared from records and personal contacts and accompanies this article. What drew these men to the Arctic? For some the job was challenging and the pay great. For others it was the unique geography and climate. Eldon Oja says, "You have to live through the seasons — the light and the dark — and experience the flowers in July and the blowing snow in winter. There is something to experience in the unconquered forces of nature."

List of meteorologists who served as OICs at Resolute, N.W.T.

Aug. '47-May '49, R.W. Rae; May '49-Apr. '51, S.W. Dewar; May '51-Feb. '52, H.W. Halbut; Feb. '52-Jul. '52, S.W. Dewar; May '52-Jul. '52, J.L. Lewis; Jul. '52-Jun. '53, M.G. Hagglund; Jul. '53-Mar. '54, C.G. Goodbrand; Apr. '54-Mar. '55, K.R. Hardy; Apr. '55-Nov. '57, R.W. Longley; Jul. '57-Sep. '57, S.W. Dewar; Nov. '57-Sep. '58, R.B. McDonald; Aug. '58-Sep. '60, R.J. Woodrow; Aug. '60-Sep. '61, J.H. McBride; Sep. '61-Feb. '62, B.A. Coulcher; Feb. '62-Mar. '63, D.W. Strang; Feb. '63-Jul. '63, V.G. Beirnes; Aug. '63-Sep. '64, M.S. Webb; Sep. '64-Oct.

'65, V.E. Stashko; Oct. '65-Oct. '66, H.J. McCabe; Oct. '66-Jul. '67, N.A. McFarlane; Aug. '67-Sep. '68, J.F. Stutchbury; Sep. '68-Nov. '69, W.H. McRuer; Oct. '69-Sep. '70, A. Pohl; Sep. '70-Jul. '71, C.A. Odegaard; Mar. '71-May '71, A.R. Fisher; Jul. '71-Sep. '71, L.D.F. Chu; Sep. '71-Aug. '72, C.A. Odegaard; Sep. '72-Oct. '72, H.J. McCabe; Oct. '72-Nov. '73, P.A. Lachapelle; Nov. '73-Oct. '74, R. Winterer; Oct. '74, T.J. Barluk; Nov. '74-Dec. '74, J. Tissot van Patot; Dec. '74-Aug. '75, G.D. Machnee; Sep. '75-Aug. '76, R.J. Woodrow; Sep. '76-Oct. '76, M. Shewel; Oct. '76-Sep. '77, R.D. Holham; Sep. '77-Feb. '78, M. Shewel; Feb. '78-Aug. '79, G.W. Hykawy; Aug. '79, E.D. Hoepner; Aug. '79-Sep. '79, E.D. Holdham; Sep. '79-Aug. '80, E.J. Oja; Feb. '80-Mar. '80, C.E. Spelchak; Jul. '80-Aug. '80, D.J. Bauer; Sep. '80-Sep. '81, S.C. Ricketts.

Served as specialist meteorologists

(at RCAF base during spring re-supply, as ice forecaster during the shipping season, as assistant forecasters during the summer or fall or spring re-supply, or as Christmas leave replacement — all between May '49 - Aug. '78):

W.E. Markham, H. Wilson, F.E. Burbridge, D. Storr, D.L. Holyoke, M. Burslem, M.N. Parker, A.B. Cooper, R.H. Hill, S.M. Checkwith, G.R. Schram, F.R. Bowkett, K.W. Daly, C.D. Machnee, W.H. McRuer, R.L. Raddatz, R.J. Lee, T.J. Barluk, E.T. Hudson, T.F. Mullane, G.W. Hykawy, P. Scholefield.

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