



This is the transponder just before being plunged to the ocean floor at the North Pole. The cord in the foreground gives the speed of drift of the icepan. The party (l. to r.) includes Ivy Iverson, U.S. Army map service, Neil Anderson, Canadian Dept. of Energy, Mines and Resources, Mike Pealman, Vice President of Ocean Research Equipment, Dr. Bob Lillestrande, Control Data Corporation, Axel Geiger and Hans Weber, leader, both of Energy Mines and Resources. The picture was taken by Leif Lungard, of Energy, Mines and Resources.

from Centennial year

exhilarating prospect that one of us could accompany them to the North Pole as radio operator for the transceiver that would be their only link to the "outside."

With the Bristol *Freighter* en route, our part in the adventure was now passive. Waiting out the long hours in our Ham Shack, my mind conjured up the perils of Polar exploration. Sharing that tension were Leading Seaman Harry Bolton, Sergeant Bob Dennett, RC Sigs and Lieutenant Bill Hillaby, RCN . . . ham operators all. The suspense of watching our inanimate radio — willing it to speak — rasped everyone's nerves. For the duration of this expedition we'd get too little sleep and too much coffee.

The Shack rattled from our relieved cheers when the set finally cracked alive . . . "This is Operation Sugar calling Alert. Party arrived at position 89.40 North 120.30 East. Camp established. Weather clear at 0400 Zulu 6 May 67." They were incredibly close to the objective. With our reply, the Bristol *Freighter* left the scientific party in isolation and headed, via Alert, for its home base at Yellowknife.

Then, serving at Alert were two

officers and five warrant officers. When it became obvious that space and weight would prevent any of us from sharing the North Pole trek, we prepared a lightweight substitute. Into a bottle, strongly taped up, we each put a small personal souvenir. The scientists vowed to drop it smack on the top of the world. It was our next best thing to being there.

The Pole party was adrift on a large ice pan. From it they regularly took sophisticated theodolite sightings on five stars and Echo II. They radioed these observations down to us. We shot them off via Ham Band from VE8RCS Alert to VE3CLJ Walt Wooding at Ottawa. He relayed them quickly to WOQUU Jack Fraser at Saint Paul who fed them into the Minneapolis Data Control Centre. Its computers were programmed to translate the shots into actual ground positions, simultaneously calculating the speed and orbit of the ice pan. Back went the readouts, reverse-route, to the Pole. From a series of such feedback the men at the top of the world could predict the exact instant they would traverse the North Pole.

A transponder was to be dropped

through an ice hole into the depths of the Arctic, to settle on the ocean floor, precisely on target. The drop had to start 21 minutes early to compensate for the 2,350 fathom plunge, subsurface currents and the one and a half knot speed of the pan. This was a tricky and delicate undertaking in that pitiless environment but vital to the resolution of several geographic enigmas. Among these curiosities was the tilt of the ocean, an important component of continental shelf equations.

Their floating home started to crack ominously. It was time to finish the job and get going while the going was good. Two single-engine *Otters*, with enough aviation fuel aboard for the 1,000 mile round trip, hustled out of Alert to rescue the party while ice pan landings were still possible. Once again, suspense and tension spread through Alert.

The explorers got back to Alert on the 14th of May. That short sentence masks many chilling adventures (including an in-flight fire) which are better told round a bottle-laden table. Let's just say that no prodigal could have had a better "welcome back" party than the dandy we gave them.