

Only seven Port Meteorological officers are employed by Environment Canada, so the intricacies of the job are little known to most AES staff. Images of fog-shrouded lighthouses and "ships that pass in the night" tend to give the occupation a romantic aura, but that is 99 percent illusion. This composite "Day in the Life", though hypothetical, tries to show **realistically** how Canada's PMOs function from sea to sea.

Vancouver's two PMOs plan the day carefully. The port is the busiest in tonnage in North America after New York. There are eight or nine ships to board that day for inspection, routine repair of weather instruments or initial contact with the captains and officers. There is a never-ending search to recruit new vessels to make volunteer weather observations at sea.

Soon after sunrise, one PMO drives down to the sulfur dock below Lion's Gate Bridge to visit a Liberian freighter. Wearing recently cleaned dark clothes, the PMO grimaces. The dock is dirty and the air full of sulfur and potash blown around by the wind. Both his clothes and his car will need cleaning again. But he is eager to recruit the freighter into the Voluntary Observing Ships program for Canada. This will be his last chance. The ship will leave Vancouver by sunset and may not return for months.

As he crosses the deck, he passes deck hands wearing life jackets in a fire drill, most of them staring at him, wondering who he is.

He finds the captain in his quarters and introduces himself. The captain's English is broken, but there is no real language problem. Among most of the foreign ships in the port, English is the lingua franca.

The PMO is given a mug of coffee and he gradually steers the conversation around to the purpose of his visit. Is there anything the PMO can do for the captain? Would he like the ship's barometer checked, a weather briefing, some maps or some weather satellite photos of cloud formations over the Pacific?

He hands the captain an auxiliary ship's code card with its explanation of the international meteorological code and a log book to record observations. The captain accepts the items and they shake hands.

A Day in the Life of:

A Port Meteorological Officer



Multilingual card

The same morning the other Vancouver PMO makes a dash for the automobile dock in New Westminster with its patchwork quilt of Toyotas, Hondas and Mazdas. He boards the big Japanese car carrier FRIENDSHIP and checks the equipment for the Automated Shipboard Aerological Program (ASAP) inside the large AES container on the top deck. Time is precious. The massive carrier only stays



Shipboard equipment

12 hours in port and everyone, including the Japanese ASAP technician, is in a hurry.

The visit to the car carrier is atypical. Unlike many other AES employees, PMOs have relatively little to do with high-tech equipment . . . at least for now. In another 5-10 years, however, the PMO's functions will probably be as automated as anyone else's.

ONTARIO

It's noon and one of the two southern Ontario-based PMOs is pleased to have completed a full morning's paper work. Administrative duties, not dock work, take up most of his time.

The phone rings. There is a breakdown of weather equipment at Great Duck Island Lighthouse on Georgian Bay. He calls the coast guard at Parry Sound to arrange for a helicopter, and drives to Parry Sound, 290 km north of Toronto. For the next day or so, his paperwork plans are shot.

At noon the other Ontario PMO leaves his Thorold office after performing preliminary work on an anemometer detector unit. At the Welland Canal, one of the busiest waterways in the Great Lakes system, he learns that the laker, CANADIAN PROGRESS will be in Number Four lock at 2 o'clock. It needs a visit.

The lock is lined with tourists staring down at an endlessly long laker, far below, which has just fitted itself neatly into the lock. The PMO strides along its length wearing a hard hat. Slowly the lock fills with water and the laker rises up between sheer walls of weatherworn cement.

When the ship's deck levels with the top of the lock wall, he steps on board and walks aft down the aisle between hatch covers and the rail, carefully



Laker negotiates canal.

avoiding taut cables. He opens a door, and climbs seven sets of stairs to the



Oceangoing vessel observes weather.

spotlessly clean wheelhouse. By now the ship is moving along the canal heading for the next lock.

The skipper stands at the wheel like an alert statue. The PMO deals with the mate. They have a long talk; the PMO goes outside, inspects the anemometer and marine thermometer screens, comes back inside, checks the weather observation log for errors. At the next lock, the PMO steps off the ship and heads back to his office. He still has time to finish fixing the anemometer unit.

QUEBEC

Meanwhile, late in the afternoon, a PMO is returning to Montreal from one of his frequent trips to Quebec City, nowadays a far busier port than Montreal. During his stay he visited several foreign ships after their long journey up the St. Lawrence estuary. He also visited the ice-breaker, CCGS PIERRE RADISSON being readied for a northern patrol.

Driving homeward he mentally rehearses the lecture on basic

meteorology and weather observing, which he will deliver to the coast guard training institute at Rimouski during the following week.

HALIFAX

In Halifax just before supertime, the PMO receives a call from a tanker. The barograph, installed by AES, has stopped drawing its customary air pressure graphs. He is asked to fix it while the giant vessel pauses on its journey from Venezuela to a Montreal refinery.

While performing this emergency task, he reflects on the antiquated shipboard weather instruments. He looks forward to the time, maybe a year from now, when automatic data collection platforms will be installed on some ships, at least on an experimental basis.

NEWFOUNDLAND

As the sun rises mistily over the surging Atlantic, the Newfoundland PMO is in a helicopter on his way to an oil rig 300 km out to sea. A slow, careful landing is made on the windswept platform.

The PMO makes a detailed inspection of all AES equipment and chats with the rig's paid weather observer concerning various problems encountered in the weather program. While there he will explain some basic meteorology to the rig's crew.

A sunbeam strokes the thermometer screen attached to the steel rail. Blue sky and bright sunshine on the horizon signal the start of a brand new day in the life of a Port Meteorological Officer.

PMOs gather at workshop

Port meteorological officers held a workshop, June 14-16, 1983, at AES, Downsview. It gave the PMOs a rare opportunity to meet, discuss problems, and exchange ideas.

Attending were: Geoff Meek, Toronto; Alec Gibb and Bev Williams, Vancouver; Mike McNeil, Newfoundland; Ron Fordyce, Thorold, Ontario; and Dennis Blanchard, Montreal.

Also present were Rick Berry, head, network operations section who chaired the workshop, Linda Sarracini, observations systems division, who acted as secretary, and George Payment, marine meteorological officer.

Participants were welcomed by Phil Aber, director, field meteorological systems branch, and Ron Miller, chief, observational systems division. Mr. Aber discussed the roles of PMOs in advancement of automated shipboard devices.

The crowded agenda included:

- communication between PMOs
- reintroduction of Supplementary Ships Observing Program
- winter servicing of Great Lakes ships
- ship's inventory of AES equipment
- training
- making marine weather observing courses mandatory for government ships' officers
- difficulties encountered in the new common code
- annual requirements for marine stationary items
- recommendation to replace U2A anemometers on ships with the MK-1
- a seven-day barograph desired by ships officers
- a better criteria to determine regional responsibility of Canadian reporting ships.

Highly technical matters such as the Sonotek Remote Temperature system and the Viasala Anemometer were also discussed.

The last PMO workshop was in 1975. This year's was the fifth in the history of Canada's involvement in the international marine weather observing program. Another workshop in about two years time is planned.



Attending workshop last June were: Geoff Meek (PMO, Toronto) left, Bev Williams (PMO, Vancouver), Ron Miller (Downsview), Mike McNeil (PMO, St. John's), Rick Berry (Downsview), Ron Fordyce (PMO, Thorold, Ont.), Denis Blanchard (PMO, Montreal), Alex Gibb (PMO, Vancouver), George Payment (Downsview).