## A day in the life of a plumber at Casey Station

This year we have three plumbers, two for maintenance work and one for project works (normally at least two if there is project works to do but last-minute changes meant one went home on the last flight before winter.

A typical day will be start work at 7:30am and finish at 4:15pm with a smoko and lunch break. We work half a Saturday and usually have Sunday off.

For those that are motivated, there is a gym or cardio room to get the heart started, a couple of others will do some stretching/yoga type while the most of the winter crew will indulge in a leisurely breakfast and throw around some friendly banter.

Our plumbing team will usually get together and discuss different plans and concerns. Who needs help etc then we will head off to whatever task is the top of the list? All pretty normal work behaviour.

I am mainly doing maintenance and repair work. As most of the station was built in the late 80's a lot of the equipment is of that age. Some things such as boilers, pumps and control systems have been renewed in the last 5-15 years. The buildings are heated by generators/ heat exchangers and boilers if required. Pipe work for heating, potable water, firefighting water, and sewerage goes to most buildings other than the workshop and the stores building. These have their own standalone systems for storing water, sewerage, and heating. The network of pipes is heavily insulated and has a heat trace along the pipe for when temperatures in the pipe get low enough to start freezing.

If on call I will follow up on any alarms that may have gone off overnight, check that the various outdoor pipes are at a good temperature to prevent freezing in the pipes then do a walk through of any empty buildings prior to working through the maintenance job list. When on call we are also required to pump water into our potable tanks, check over the sewage treatment plant and incinerate burnable rubbish such as timber, cardboard, kitchen wastes etc.

Pumping water is not quite as simple as going to a lake/river/dam/bore and turning a pump on. At Casey we have few sources of fresh water. The first option is a small lake at the rear of our tank house which freezes completely to a depth of around 2.4m. The second option is another larger lake that is about 150m away from the first lake, this lake freezes to nearly 3m and has a depth of around 4m. The third option requires loading up a vehicle with 1000 litre containers, driving a few Km's and there is another lake that is about 3m deep and freezes to around 2m thick.

Option one has what we call a melt bell sitting on the lakebed. The melt bell has water circulating through it a 40 deg Celsius. The heat radiates from the melt bell and melts the ice enough for us to pump between 3,000 and 6,000 litres per day. A typical day will be around 4,500 litres per day for a station of 27 people.

If the level of the ice in lake one drops below 1.5m we need to drill a hole through the ice in lake two, run a series of hose between both lakes, then set up a pump and pump between the two for 2-6 hours depending on the amount of water required and how long we can pump before the hoses freeze up. In recent times there has been no need to collect water from the third lake.

Each month we work our way through the plant rooms in the various buildings completing inspections, lubricating bearings, looking for leaks, listening for new noises, checking glycol ratios, and checking that actuated control valves are moving freely. In the warmer months we generally found no issues. Its only once the system became loaded with the winter temperatures and winds that the systems started to show things that needed repair or adjustment.

Each building will have an annual service, these are spread through the year with the important ones such as the powerhouse and emergency powerhouse being serviced in the summer months. These to take about 7-10 days for two plumbers to work through their tasks.

Some of the typical repairs will be repairs to leaky or noisy pumps or fans, repairs to leaking actuator valves, leaking pipes, and the like. While doing or plantroom checks we will often make minor alterations to rectify issues that have been around for years or as time changes, there are different ways of doing an outdated task.

After work some of us head to the gym or cardio rooms, others head off for a walk within the station boundaries which provides an opportunity to have some time to oneself. There is a bar which opens around five for those that want a brew of some sort. We have to order any alcohol before heading down and it is stored away and rationed out

through the year. There is also the option of consuming the home brewed beers and ciders which most of the time are tasty/moreish.

Dinner is set for between 6-6:45. We are spoilt for food here. Our chef never fails to provide a range of tasty dishes that make it hard to be disciplined and overindulge.

The evenings can be spent back in the bar, watching a movie, often there is a jigsaw puzzle on the go. Some will sit in the living areas reading a book or their favourite device. Others will head to their rooms and not surface again until the morrow. The nights that are not cloudy present opportunities for photographers to capture images of the milky way or the occasional Aroura. One has to be keen though as the cold seeps through gloves and boots pretty quickly especially when touching cold tripods and cameras.

There are no scientists here this year due to COVID which means we are providing minimal opportunity to provide the science support the trades normally provide. We do go out onto the ice and measure the ice thickness at specified locations which gives an opportunity to get off station, ride quads on ice and as the season changes we get to witness the return of the wild life to start the next lap of the breeding cycles.

Weekends give the opportunity to head out to one of four remote huts for a change of scenery and the opportunity to go for a wander and explore the terrain. We have to carry a survival pack (15-20kgs) whenever we go off walking so it is a fair work out.



The remnants of Wilkes Station. Abandoned due to the amount of snow build up that occurs. A lot of clean up still to happen. It is a good 60 years since it was in use.



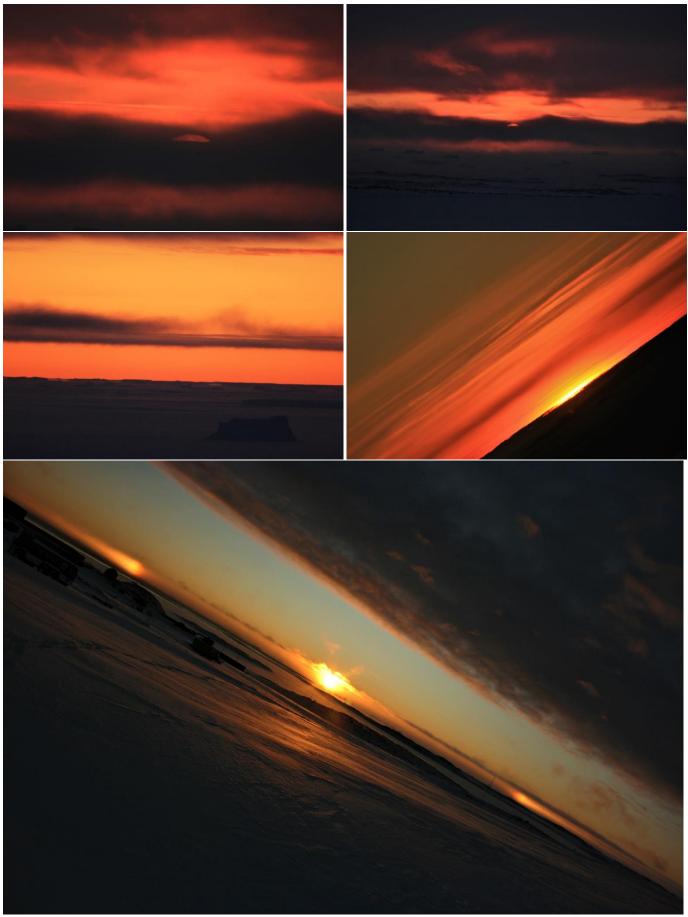
We did a trip across the ice dragging sleds. This one is an older timber one with leather bindings on the joints.











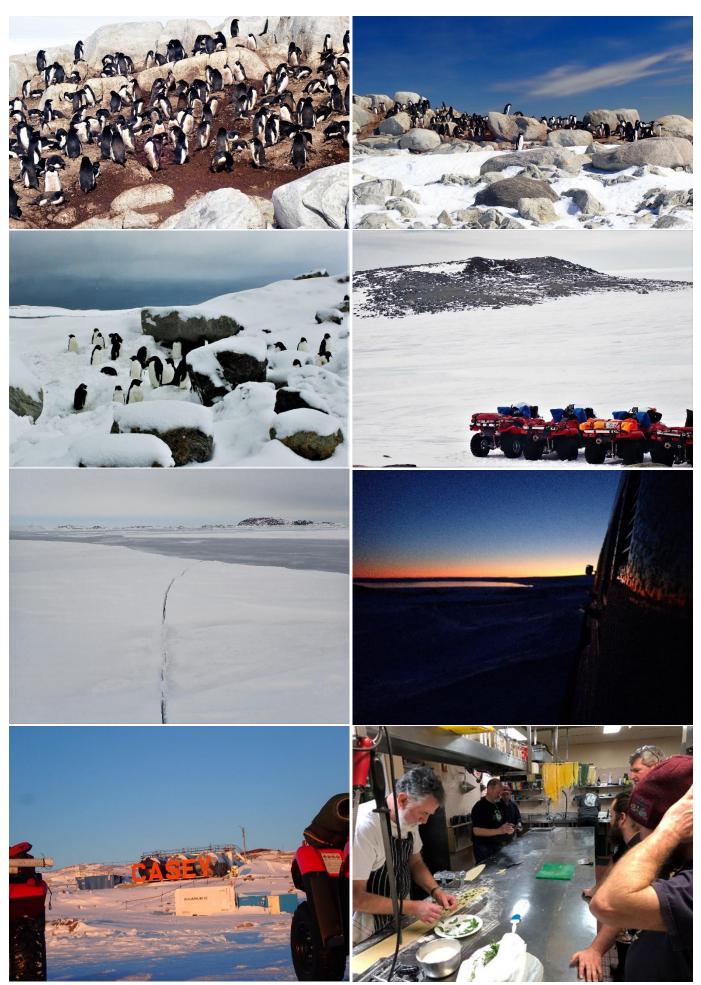
The sunlight reflected on either side of the sun is referred to as sun dogs



Repairs to a fuel line



The gun plumbing team



Looking at Casey wharf from the sea ice

Pasta making lessons to help pass the evenings

Jacks hut with its throne with a view

Milky way













A taste of home. Barbeque feast. How good is this

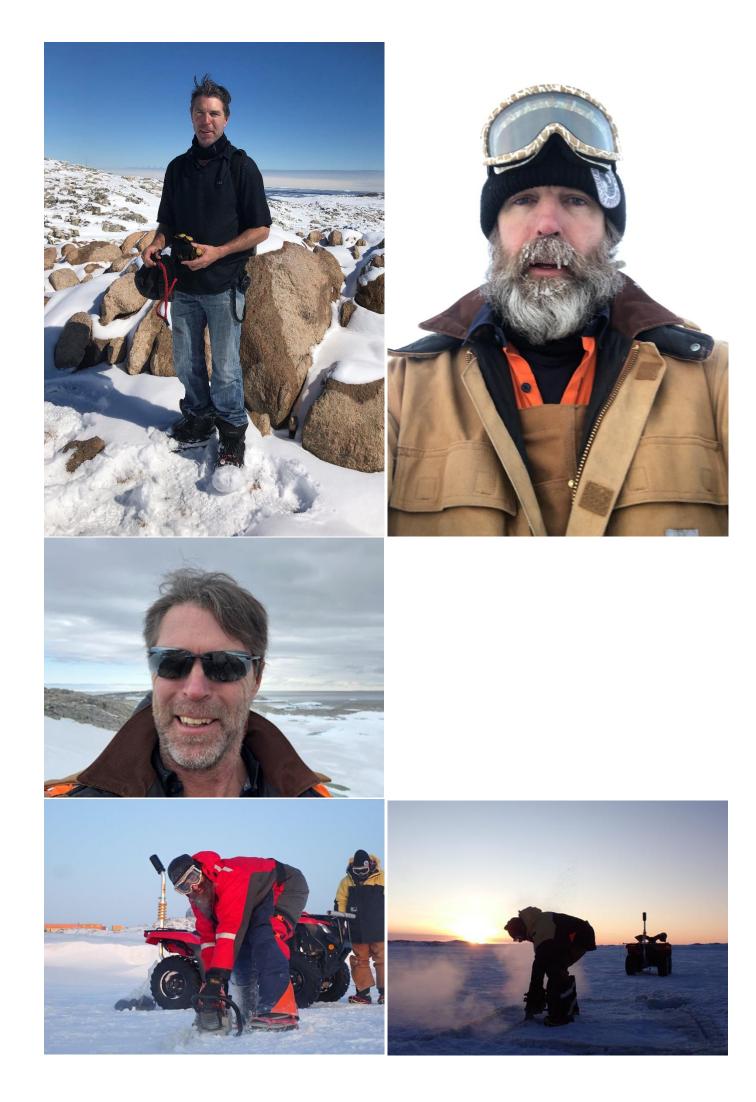


Perspectives. How small are we in the scheme of things?











Cutting the Ice for a swim hole in June.



Testing water storage in one of the lakes





Remote camera maintenance



Sea Lions





