

17) M.V. W.A. Mather  
Los Angeles 21/7/75 - 18/10/75 Los Angeles.

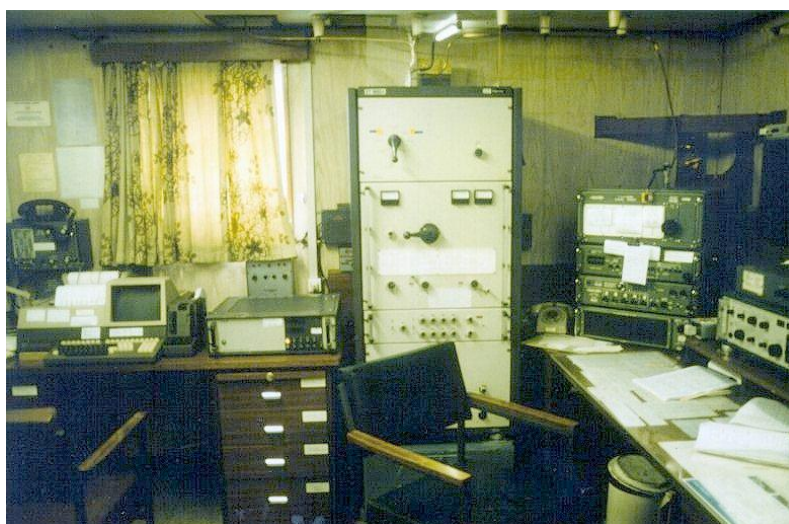


Shorter, more interesting trips with oil products (petrol, naphtha, benzine etc).

Although the ships were not strictly speaking authorised to carry chemicals, some cargoes such as naphtha or benzine were chemicals, but classed as oil products. Ventilation was to the open air, and no special precautions were taken regarding poisonous vapours. A real chemical tanker has a closed venting system which filters harmful vapours before releasing them. With us, the main precautions were to prevent inflammable gas build up, and a strict no smoking on deck was enforced. Depending on wind direction and atmospheric conditions, a strong smell of "cargo" was sometimes present even within the accommodation.

Some of the cargo could be classed as poisonous (particularly benzine, which is now known to cause cancer), but at that time were treated as normal oil products. We used to use it sometimes for cleaning and de-greasing!

One of the effects of my having to do more work in the engine room was that I saw much more of the machinery down there. I began to appreciate sometimes how hard a marine engineer's job can be. Virtually all maintenance was done on board. This could sometimes entail taking apart large chunks of the main engine so surveyors could see internal components. One could see the enormous size of things. Pistons weighing around 10 tons, and cylinders that one could easily stand inside. I have personally sat inside the crankcase of the main engine, sitting astride the crank shaft like on a horse. Lifting out a piston was hard enough when alongside, or at anchor in a calm harbour. When, however, an engine breakdown made it necessary at sea, it became a major undertaking. Very often extra hands were called below to hold the item being worked on still, using ropes and pulleys. When the ship was rolling in a seaway, things could go dangerously wrong.



Although the machinery was so big, and very solidly made, mechanical tolerances were extremely fine, and could sometimes be compared to those of a watch. A 10 ton piston flying around could easily damage something (or someone!) beyond repair.

The engine balance and absence of friction was so good, that a man standing on one of the 7 or 8 pistons would cause the engine to slowly turn just because of his weight. Cylinder cover securing nuts were not done up with a torque wrench, as in car practice. We used a huge spanner, a 6 to 8 foot length of pipe as an extension and a sledgehammer! The cylinder covers themselves being machined metal without any gaskets, making a pressure proof gas tight seal on the machined cylinder top.

I learned about many of the ancillary systems needed to keep everything running, and our lives comfortable. We had our own seawater distillation system, our "rain maker" as we called it. This was able to supply us with around 25 tons of fresh water a day, so unlike the earlier mariners, we never had to bother too much about water. We could have a shower whenever we liked, and drinking water was available in virtually unlimited quantities. The "rain maker" contained a "hard" ultra violet purification system to kill any bacteria. As the distillation operated under vacuum, it caused sea water to evaporate at around 40 degrees Centigrade, which was not hot enough to kill off any bugs. Even so, we did not turn our "rain maker" on near the coast, just in case anything undesirable was in the water.

We also had our own sewerage system. More and more areas of the world required that ships did not pollute by dumping raw untreated sewage over the side. The end result of our system was almost pure water and sterile sludge, which could be safely discharged. This was only the case, however, when everything worked properly. Sometimes the system had to be cleaned out by the engineers if too much bleach or chemical cleaners had been used in the toilets or showers. These killed the sludge eating bacteria, and stopped the system working. Cleaning out the system was a most unpopular job, and many comments were made about the unfortunates who had to do it. Other reasons were blockages caused by the wrong toilet paper having been used or maybe condoms being flushed down the toilet by officers or crew in port. They blocked valves and pipes and caused much unpleasant fault finding work.

Electric power was essential, so we usually had a total of three generators of around 500 KW each, with associated switchboards and control systems. Any two of them could be run in parallel for heavy loads, or when additional security was required (like in a narrow seaway where loss of power could be disastrous). We had various air compressors for starting the main engine, the generators, and to provide compressed air for deck tools such as de-scalers, drills and wire brushes. There were main engine lubrication and cooling systems with huge pumps, tanks and piping. Two boilers, one oil fired for use in harbour, the other heated by the waste heat contained in the main engine exhaust gave us hot water, heating and steam for cargo pumps and deck machinery. The engineers were generally skilled enough to actually make some replacement parts from scratch if we did not carry them ready made. We carried raw materials such as bar-stock, sheet steel, brass and copper, as well as a lathe, drills, welding and cutting equipment (electric and gas) and sometimes a milling machine too.

Comprehensive monitoring and alarms for all systems, as well as remote control of some machinery was also included, and were an important part of my responsibilities. For use in the tropics, we had a large air conditioning system for our accommodation, and another, separate one for the engine control room. (This one was mainly so the electronics didn't overheat, not primarily for the watch keepers who were working down there). We had two refrigerated storage rooms for our food. One kept very cold for meat, another less so for vegetables and other perishables. The days of

salt pork and ships biscuits have long gone. Our galley was also all electric, spacious and well ventilated. It too required considerable power during meal times. Another very important facet of my job was the various entertainment systems we had on board. TV, radio, videos, film projectors, tape recorders and amplifiers. If anything went wrong here, I was the resident expert and repair shop. Failure to be able to fix things straight away was often met with disbelief, anger or other forms of unhappiness. Films, music tapes and later videos were a much valued way to relieve the boredom of long voyages, and the entertainment equipment was therefore considered most essential. Shipboard life could perhaps be summarised as 99 percent boredom and 1 percent panic!