

IF IT'S NOT BROKEN

DON'T FIX IT

By Capt. Don Rose

*If a piece of machinery is working fine, look after it and maintain it.
HOWEVER, if it's not broken for goodness sakes do not try to fix it.*

The tug "ROSARIO STRAITS" was seventy-one feet long and powered by a seven hundred and sixty-five horse power Caterpillar engine coupled to a Lufkin reduction gear. The crew complement consisted of master, engineer, fist mate, second mate and one cookdeckhand. I was sailing as first mate.

On top of the reduction gear an air compressor was mounted driven by two belts from one of the clutches. Whenever the main engine was running with the reduction gear engaged in ahead or astern the belts from the clutch drove the air compressor. This tug like most had a considerable amount of pneumatic equipment, therefore maintaining sufficient air pressure was critical. The compressor was equipped with a relief valve that allowed it to pump air back into the atmosphere once air in the tanks reached the prescribed pressure. The back up to this was another compressor driven by an electric motor that automatically came on once the air pressure went below a preset level. In the past, there had been a number of problems with the compressor driven from the reduction gear. It had been working fine since the last repair that had been over two months ago.

We were crossing Georgia Straits towing two empty chip barges from Harmac to the North Arm of the Fraser River. The time was 03:00 and we were a little over half way between Entrance Island and the North Arm Jetty. The wind had increased from light to SW 20 gusting to 25, the seas were building and the forecast predicted more to come.

The engineer returned to the wheel house after doing a routine check in the engine room. He asked if we could shut the main engine down so the air compressor driven off the reduction gear could be disconnected. My immediate response was **NO #\$\$%@& WAY**. I then explained the weather situation plus the fact that we had two barges in tow therefore whatever was wrong with the compressor it would have to wait until we arrived at destination. He continued to argue that it was necessary that the compressor be disconnected because he wanted to work on it. I continued to tell him with the use of some colourful expletives that I was not going to shut the engine down under these conditions. He then said that since I was being so stubborn and belligerent he was going to go ask the captain. I then said if you think I'm being nasty think what the captain will be like when you wake him up with a stupid request like this. I then assured him that once we were secure at destination, the captain would let him shut down the main engine as long as he wanted. He then agreed that this was a better plan.

On arrival at the tie up in the North Arm of the Fraser River the barges were secured at the Inner Light Scow Berths. The weather forecast had changed and was now predicting conditions to improve. We ran the tug light to Celtic Shell Oil dock, where we refuelled and disconnected the air compressor. The engineer could now do what ever he wanted to it while we were underway.

With a full load of fuel and water and the weather improving we departed the North Arm

with two barge loads of chips for Harmac. Prior to arrival, dispatch advised that after we delivered our loads at Harmac we were to take an empty chipper to Chemainus, then return to Harmac with a load.

On arrival at Harmac the engineer asked the captain if he could again shut down the main engine in order to connect up the compressor. The captain advised him, there was just enough time to make the tide in Dodd Narrows, therefore, he could not do it now. However, on arrival in Chemainus he would be able to shut down the main engine and reconnect the compressor. At this time the rest of the crew was not aware of this conversation.

I had just returned to the tug from tying up the loads when the signal bell on the winch rang four times which meant "wanted forward". I went forward and as I entered the wheel house the captain ordered me to go to the engine room and check on the engineer. As I entered the engine room a screwdriver went flying across as if it was fired from a gun. The engineer went to where it landed, picked it up and proceeded back to the compressor. Just then the gear went into neutral so he proceeded to pop on the last belt. Since the gear only paused three seconds in neutral he did not get the screwdriver clear and again it was ripped out of his hand and flew across the engine room. Since this was the last belt, he then started putting the guard over them and indicated to me that he was finished. Needless to say I was shocked at this performance because at this time I believed it was done with the captain's approval.

When I returned on deck we were about to connect our towline to the empty, so I assisted the crew in doing so. Once connected to our barge and away from the dock we slipped out approximately two hundred feet of tow line after which I returned to the wheel house to continue the rest of my watch.

After I took over the con, I commented to the captain that I was not impressed with how he had allowed the engineer to put the belts back on the compressor. He immediately informed me that what the engineer had done was not with his knowledge or permission. He then made me aware of their previous conversation and that he had sent me to check on the engineer because he suspected that he would do something stupid like that.

The engineer entered the wheel house and the captain immediately started reprimanding him for his totally unsafe work practise. He was also reprimanded for disobeying a direct order. At first the engineer tried to defend his actions claiming that both compressors should be on line. The captain stated that since we had operated quite well with one compressor at times for several days, a few more hours would be OK. The engineer then admitted that he was wrong and accepted his reprimand.

To break the tension I instinctively asked the engineer what had been wrong with the compressor. His reply was "nothing wrong." In the past we had a number of problems with it. However, it had worked quite well for sometime now and he wanted to see why it had not broken down lately. If looks could kill, he would have died on the spot, with the look the captain gave him.

Just as we were entering Dodd Narrows, the smoke alarm for the engine room started sounding. Fortunately, the captain was in the wheel house so he took over the con while the engineer and I went to check out the engine room. We cautiously entered the engine room because

we believed there could be a fire there. On entering the engine room, there was not a great amount of smoke just enough to be noticeable and set off the alarm. Around the area of the compressor and reduction gear were fragments of the drive belts. The smoke was rapidly dissipating as there was no longer a source. The air compressor was extremely hot to the touch and we were also able to tell that it was seized. I pulled the dipstick out to check the oil in its base and it showed nothing. On seeing this, the engineer immediately poured some oil into the base. Unfortunately it was too late.

When we returned on deck the captain asked what the problem was. I told him that the air compressor seized. When he asked if we knew the reason, the engineer said he could not understand why because it had checked out OK.

Nobody asked me if there was oil in the base so I never volunteered any information. It was not my responsibility and I was not going to have to do any explaining, so I avoided talking about it.

A few days later we went into the ship yard and the air compressor was replaced. My assumption is that when the engineer took it apart and put it back together he forgot to put oil in it.

I think he learned from this experience that **if it's not broke don't fix it.**