

## **Kan Seng Chut's Sagas Part 1: How I ended up with NOL and Nightmares on Neptune Garnet**

My joining NOL in 1969 was not planned for at that time NOL crew salaries were the lowest in the market. As 4th Engineer my basic pay was \$450 per month when Bank Line paid me \$1000 as junior engineer. I was tricked by Lua Cheng Eng to sign on for the delivery voyage of Neptune Garnet from Liverpool to Singapore as it would take only 2 months and that I could sign off on arrival Singapore. My main motive was to experience flying for the first time and to watch Liverpool play football. Lua's offer seemed attractive from this view point for I had no intention to stay with NOL. However, when we arrived in Liverpool, all crew members were ferried to a British general cargo ship named 'Eden' owned by the Royal Mail Lines. This ship was given by the British government to Singapore as part of the aid for pulling out all British forces from Singapore by 1970.

Our crew comprised the following (*many of the names supplied by Lim Tau Kok*):-

Master – John Parker Hogg (British)  
Chief Officer - Lim Ong Tong  
2nd Mate – Woon Kai Jee  
3rd Mate – Lee Chong Yew  
Radio Officer- Chong Nee Fee  
Deck Cadets - John Lim, Tay Kes Siong  
Chief Engineer - Mr. Jerzy Kukla (Polish)  
2nd Engineer – Raja Gopal (Indian)  
3rd Engineer - Joseph Arul (ex-Polytechnic)  
4th Engineer - myself  
5th Engineer - Yan Yin Tong, Tham...Seng  
3 Engine Cadets including Lim Tau Kok  
Electrical Engineer - Frank Holiday (British)

I cannot forget the welcomed from the British crew who handed this 1956 British built ship to us. They laughed and remarked, "You guys going to run this ship? Good luck!" Initially I did not catch their remarks until I went down to the engine room. The main engine was a Harland and Wolff opposed piston 6 cylinder engine. A quick glance at the engine tools for dismantling the pistons were big ratchets, big rams and big sledge hammers. Straight away I knew we were going to have a tough time. It was going to be a hard ship to crack. After 2 days of briefing by the old British crew we took over the ship and renamed her "Neptune Garnet" flying our Singapore ensign.

After taking some stores and bunkers we ballasted to Hamina, Finland for loading cargo. I then found out that the main engine had no diesel oil connections, only 180 centistokes viscosity fuel used for start/stop and sea voyages. Imagine this vessel was built in 1956 and the British have perfected the design/system to use heavy oil for maneuvering on this Harland and Wolff engine. I think even MAN, Sulzer, B&W were using marine diesel oil (MDO) for maneuvering at that time. Actually after tracing the system there was nothing much, all she needed was an extra circulating pump and heating the heavy oil in the service/settling tanks to a higher temperature. In my 8 months on board she never failed to start on heavy oil.

While we were in Hamina loading newsprints for USA, our Chief Engineer decided to take out one unit of the main engine for overhaul. As usual, the 4th Engineer (myself) was assigned to dismantle the top exhaust piston while the 3rd Engineer (Joe Arul) would dismantle the bottom main piston. It took me and 3 others 2 hours to remove the top piston. The piston was lifted up and placed on a stool for cleaning on the top platform. Joe Arul and his gang could not unscrew the bottom piston nut from the crosshead bearing. After hammering 2 days the nut did not moved at all. I think the former crew has over tightened

the nut. The Chief Engineer came down a few times, just shook his head and walked off. On the 3<sup>rd</sup> day the Chief Engineer gave instruction to box back the top piston since from the scavenge ports there were no broken rings found in the bottom piston. After boxing back the unit the Chief Engineer gave instruction to do another unit, but for this occasion I was assigned to do the bottom piston while Joe Arul would remove the top piston. I then realised why this vessel has a 20 kg ram! With a lifting eye for chain block hook for lifting or swinging. Although I have not done it before but during my apprentice days I have seen fitters using rams to bang heavy duty spanner to turn very tightened nuts. Next with a chain block the ram was raised level with the spanner. The spanner was then tension tight with another chain block. The ram was then swung back to bang on the spanner. After almost 2 hours of banging the nut started to turn and finally got loose and removed. The main piston was then lifted out for cleaning and calibration. From that day onwards the Chief Engineer assigned me for all crankcase work and Joe Arul for top platform works.

When I found the cargo being loaded in Hamina was to be discharged in New Orleans it then occurred to me that I would not be able to sign off in 2 months time. I felt misled by Lua Cheng Eng. After discharging in New Orleans she called into Houston to load generals for Jeddah, Saudi Arabia around October 1969. Neptune Garnet was a 5 holds/5 hatches tween-deck vessel. It also had a small refrigerated cold room aft above the steering flat. In it were loaded with Christmas goodies for the USA Embassy in Jeddah scheduled to arrive before Xmas.

A few days after departure Houston steaming about 12 knots near the Bermuda triangle I heard knocking from No.4 crankcase around 10 pm during my 8/12 watch. I informed the Chief Engineer. He came down placed his ear on the crankcase door and said not to worry and left. By 2300 hours the knocking was louder and the crankcase doors were fairly hot. Again I alerted the Chief Engineer. This time he agreed to reduce speed to check if the knocking persisted. By then the crankcase doors were so hot not to touch. The Chief Engineer then decided to stop the engine for investigation. After allowing 20 minutes for cooling, the crankcase door was opened. The lube oil pump was stopped. To my shock, I found the bottom of No.4 crankcase flooded with white metal residues. The Master was informed of the reason for having to stop the ship.

On close examination the No.4 crankpin was badly scored, the bearing keeps were rubbing on the crankpin. The Chief Engineer told us to remove the No 4 crankpin bearings, to hang up the bottom piston on its crosshead guides and place the exhaust piston to blank off the exhaust ports. The No.4 crankpin lube oil holes were to be plugged so that we could operate the engine at slow speed to a port of refuge for repairs.

I was delegated to remove the crankpin bearings first and I did it without much problems. Next the tricky part, how to remove the 2 eccentric strapped side bearings. At that time it was decided to form 2 teams working 6 on 6 off to minimize fatigue. The Chief Engineer and I formed one team and the 2<sup>nd</sup> and 3<sup>rd</sup> Engineers the other. I suggested a safe way to remove the eccentric straps which was to lift the whole exhaust piston with its tie rods vertically together with the top halves of the straps and then lower the bottom halves into the bottom of the crankcase. To then remove both the bottom halves out of the crankcase then lower back the top straps on to their eccentrics. And then to remove the top halves holding down bolts and nuts and then sling out the 2 top straps. The 2<sup>nd</sup> Engineer thought otherwise. He felt that my method would take more time and suggested that the method described in the manual of the engine maker be adopted. The maker's method required the 2 straps to be removed by turning the engine slowly to lower the bottom halves into the crankcase first and then to lift up the top piston with its tie rods to take out the top straps bearings. I kept silent for as 4<sup>th</sup> Engineer, I could not overrule the 2<sup>nd</sup> Engineer. I was off on my 6 hour shift and the 2<sup>nd</sup> and 3<sup>rd</sup> Engineers were to start with the removal of the 2 side straps. When I return to begin my 6 hour shift, I saw my nightmare.

The 2<sup>nd</sup> and 3<sup>rd</sup> Engineers were in the crankcase, the 2 eccentric straps were half open, the forward strap holding down studs were bent i.e. now the straps could not be separated, stuck solid. I asked the 2<sup>nd</sup> Engineer what happened. He said initially while turning the engine the straps started to separate but later the turning gear motor gave out smoke and stopped. He then tried to reverse but nothing happened, then he saw the forward strap was bent. I then told him had he followed my method this disaster could have been avoided. I told him now with the strap stud bent we could neither lower nor box back both straps, so, "What are you going to do?" Next the Chief Engineer came down and he when saw the disaster he said "ma ma mia" being Polish. He virtually chased both the 2<sup>nd</sup> and 3<sup>rd</sup> Engineers out of the engine room. I told the Chief Engineer we have no choice but to hack saw the bent stud in order to remove the lower strap. The fitter went to the workshop and managed to find 3 hack saw blades only. I told everyone to be careful as we can't afford to break any blades. The sawing began; each one took turns to saw the 5 inch diameter stud. It took us nearly 2 hours of sawing to saw off the bent stud. The engine was turned back with the straps at top dead center. Using the engine room crane we lifted the exhaust piston together with its tie rods up and slowly allowed the 2 bottom straps to cascade down to the crankcase. Both the bottom half straps were slung out with chain blocks. The exhaust piston was then lowered back to rest on the eccentrics. The nuts were removed and the exhaust piston was lifted up free from the top half straps. The 2 top halves were slung out of the crankcase. By then all of us were very tired and the Chief Engineer told everyone to take rest.

The next job was to remove the connecting rod out of the crankcase and hang up the bottom piston with its crosshead pin on the crosshead guides. This assignment was given to the 2<sup>nd</sup> Engineer/3E team. Before retiring I suggested to the 2<sup>nd</sup> Engineer to remove the exhaust piston out first then lift the piston with the crane, to bolt in the locking bar on the crosshead guides and then lower the bottom piston to rest on the locking bar.

I returned to meet disaster #2:

This 2<sup>nd</sup> Engineer just could not accept my suggestion so he took a shortcut. He rigged 2 chain blocks under the entablature to lift up the bottom piston with its crosshead. Lim Tau Kok was in the team and while heaving up the piston one of the wire ropes snapped and the whole piston came crashing down on the piston rod stuffing box and cracked the entablature. Tau Kok was lucky that the snapped wire ropes did not hit him.

Again the Chief Engineer chased the 2<sup>nd</sup> Engineer out of the engine room. Yours truly had to pick up the pieces again after this second mishap and from that day onwards I have a very poor impression of the competency of Indian engineers. Although I was only the 4th Engineer at that time the Chief Engineer only trusted me in my work and he would address me as Mr. Kan but not to the 2<sup>nd</sup> or 3<sup>rd</sup> Engineer. He would just call them by their names.

After this 2<sup>nd</sup> disaster the Chief Engineer gave instructions that all work would be supervised by me. So I did the work, got the bottom piston hung on its crosshead guides, took out the crosshead bearings and its connecting rod. The engine makers had supplied a crankpin taper plug blank for blanking the lube oil holes should we need to blank a crankpin for emergency. This blank was then clamped over the crankpin, the lube oil pump was started to test for leakage and found intact. Luckily the 2 cracks on the entablature were not serious and we managed to seal it with plastic steel. All in all this stoppage took us almost 5 days to get the engine back for operations. So from a 2 day job we ended up 5 days purely due to the stubbornness and stupidity of the 2<sup>nd</sup> Engineer and he nearly crippled the engine.

With the unit blanked we sailed at about 10 knots for Cape Town to repair the scored crankpin. After about 13 days we were safely moored alongside for repairs. The underwriter surveyor from London Salvage came on board for inspection. This surveyor was formally from Singapore (can't remember his name). The honing specialists from Golten Service,

Norway were engaged to do the grinding. After thorough inspection and measurements of the scored crank pin, the specialist estimated he may have to grind off 2 mm or 4 mm undersized in diameter. The 2 specialists took 6 on 6 off shifts for the grinding and took almost 21 days to complete. The undersized bottom end bearings were then machined and fitted by the workshop. The eccentric straps were refitted with a new stud and the complete engine was ready for departure. Our port stay was almost a month in Cape Town. It took us another 2 weeks before we arrived at Jeddah, well after Christmas. Later we heard the American Embassy had to airfreight their Christmas goodies in for their Christmas party as our ship was 6 weeks late. This experience it taught us one thing - don't take short cuts, don't take unnecessary risks when working in the crankcase.

After this incident the remaining voyages were normal but she did not called into Singapore for after Jeddah, we sailed to Basrah to load bulk fertilizer for Japan by-passing Singapore. A week before arrival Osaka one main engine No.3 liner cracked. Fortunately we had one spare on board so we changed it in less than 12 hours. In Osaka we were lucky to visit Expo 70 when Singapore had a stand with its theme "Garden City of the East". (Singapore in the 70's started to plant a lot of flowers and trees to make her a green city.) However in Osaka we discovered 2 cracks near the exhaust ports of liner No 4. As we had no more spare liners, the Chief Engineer got in Metalock Osaka to metal-lock the cracks. By this time, the Indian 2<sup>nd</sup> Engineer was taken off and replaced by Low Tin Seh.

Within less than 8 hours of leaving Osaka for Hong Kong, the metal-lock repairs gave way. We then cut off No 4 unit and ran her dry into HK. Our luck ran out in Hong Kong when we discovered another liner, I think No 2 liner was also cracked. So with 2 liners out and with the message from NOL informing us that they have placed orders for 5 new liners from the makers but earliest delivery in 3 months time, we faced a crisis. The Chief Engineer called a meeting with Tin Seh and me on what to tell the Captain. If he is to tell him the truth, then he would definitely say the ship was not seaworthy and we would be stuck in HK for next 3 months. The 3 of us agreed to just tell the Captain that we could steam on only 4 units. We left HK and steamed at 7 knots to Singapore. We reached Singapore safely but for berthing we got an extra tug to assist her. I was the one on the maneuvering stand but on occasion the engine could not start I had to do a quick reverse on air and start ahead again. All this while we did not tell the Captain of the actual state of the main engine until we finally berthed. I still could not sign off yet and was told to stay back until her dry docking in Sembawang Shipyard and until the new liners' arrival. It was during the docking period that I met Mr Chan Boon Tin the Marine Department surveyor temporary seconded to NOL for docking period. About 6 weeks later 2 new liners were air-freighted in and the yard did the renewals. I finally signed off after 8 months but I gained a lot of experience sailing on this 'hard ship' the Neptune Garnet. And that was the end of my service on my first NOL ship. I told myself I would not join NOL again but when I went up for my 3<sup>rd</sup> attempt on my EK the examiner Chan Boon Tin passed me and told me to go to Amsterdam to take over another British ship, also part of the British aid to Singapore. So I got stuck with NOL by circumstances.

This 2<sup>nd</sup> vessel was an ex-Cunard vessel, much younger and propelled by a Sulzer RD engine semi-automatic. Her 4 generators were Rolls Royce high speed diesels - a nightmare for any 3<sup>rd</sup> Engineer who is typically put in charge of generators. This 2<sup>nd</sup> British-aid vessel was named Neptune Amber. Although the main engine did not give problems, the 4 Rolls Royce diesels gave us lots of problems initially until I solved the recurrent problems permanently for NOL.

Kan Seng Chut  
June 2013