

My Recollections as an Apprentice (1968 – 1973)

On 18th March 1968, I started with the Port of Singapore Authority, Dockyard Department (subsequently established as Keppel Shipyard Pte Ltd). That first day, my cohort of 60 plus apprentices (16/17 years of age) reported to the Training Centre at Bukit Chermin Road. The applicants were mostly “O” Level students, some with very good grades (good enough for continuing with their Pre-U classes) coming from schools like (including a few from Raffles Institution) Tanglin Technical (highest passing rate for the 1967 “O” level and was the first batch of students taking the “O” level), Queenstown Technical (considered the best technical school) and several other technical and non-technical Schools (a good mix of students from different background). In that era, we were motivated to be in the heavy industry as the government was encouraging youngsters to build a rugged society.

We were divided into 5 groups of about 12 apprentices with Groups A & B attending day-release courses at Singapore Polytechnic, and Groups C, D & E attending day-release courses at Singapore Vocational Institute. Groups A & C to be trained in ship construction, B & D to be trained in mechanical and E to be trained in electrical. I was in Group A.

There were four special apprentices being sent to study full-time at the Singapore Polytechnic in mechanical engineering (paid to study). One of these four, Mr Sum Feng Chong, was active in student union work and became President of the Singapore Polytechnic Students’ Union once. During vacations, they returned to Keppel for on-the-job training. Their path and future were of a more executive nature.

One of them, Mr Tan Dek Joon, is still with Keppel today.

The Education Officer was a British Mr K. G. Richards, replaced by Mr Leslie Kemp and later by a local ex-teacher & ex-Singapore Vocational Institute head-of-department, Mr Lai Pak Onn. When Mr Lai was promoted to Head of Management Service Unit, Mr Koh Foon Choon took over. A number of training instructors were ex-technical school workshop instructors and ex-apprentices. The training centre also trained technical teachers from the Singapore Vocational Institute. H. M. Dockyard (subsequently established as Sembawang Shipyard Pte Ltd) also sent their first-year apprentices to Keppel’s training centre for training.

Our pay/allowance structure was:

- First year - \$ 18.04 per week
- Second year - \$ 19.36 per week
- Third year - \$ 21.12 per week
- Fourth year - \$ 23.32 per week
- Fifth year - \$ 25.52 per week

(The odd figures were derived from odd hourly rates, plus a housing allowance of also an odd number).

Subsequently there was an adjustment after feedback from apprentices during normal classroom sessions / discussions. Despite the low allowances, quite a number of us were riding motor bikes. A couple also drove family cars. There was a sarcastic remark from within that apprentices were overpaid.

This batch of apprentices was bonded with Keppel for 5 years. Breaking bond would mean having to pay Keppel \$2,800. Not known of any one breaking the bond but there was a couple of cases of not signing up and decided to leave the apprenticeship scheme. We were signed as “indentured apprentice”.

First year was like schooling, except we spent more time in the workshop doing practical learning and less classroom lessons. It was five and a half-day / 44 –hour week, half-day on Saturday for sports & educational movie, and one day away from the Training Centre attending classes at the Singapore Polytechnic or Singapore Vocational Institute as applicable. Life was fun, easy going and the atmosphere was casual. I had time to join/spend time with the Port Authority Recreation Club as member and took up Judo (which I had not the chance to do so in school). After 4.30pm, apprentices socialised at this PARC conveniently located on the way out from the training centre towards Telok Blangah Road.

There was no canteen initially at the training centre. Most of us brought home-cooked lunches.

After one year at training centre, we went on through second, third and fourth years doing on-the-job training within the shipyard and workshops, and occasionally at the anchorages. We were attached to various workshops to learn the different trades and be trained under a structured programme. Regular reports had to be made to the training centre. There was a dedicated training officer (Mr Jason How) assigned to manage us. He made regular visits to the yard to give moral support to the apprentices.

No overtime work was allowed in the second year (life was still very student-like). We were reminded that apprentices were to learn and not expected to make money for the shipyard. Training was simple. We were attached to skilled workers - one apprentice to one or two workers, depending on the simplicity/complexity of the assigned job/task. It was learning by helping or doing the job. These lead to learning all kinds of habits too. In a way, apprentices were smart workers - learn very fast including vices. Workers imparted other skills like visiting bars, etc.

It was popular for apprentices to take the City & Guilds of London Institute external examinations. Many passed the C & G craft, advanced craft and technician's certificates within the apprenticeship years.

Apprentices were thrifty. The Telok Blangah (gate10) coffee shop served 40 cents wanton noodle. For the big appetite ones, the option was to swap the wantons with doubling the amount of noodle with slices of "char siew". For smoking beginners, a stick of cigarette was 5 cents including lighting up. A glass of iced cold drink was 5 cents too. That was lunch for many apprentices including some seniors. Some could still have sufficient money to buy LP & EP records of their favourite groups and visited night spots.

A favourite pastime after lunch time was "jamming sessions". A couple of apprentices including a senior (only knew him as Elvis Soh) were good at strumming the guitar. Those keen formed around each other and sang the pops. One apprentice (Anthony Toh) from this batch was so good at it that he was performing part-time (earning an extra income) at hotels' night spots. I got to know a senior apprentice (Joseph Wong) who had a full set of band instruments at home. Together with him and 2 other seniors (Roger Lum, and nicknamed "fatty" Fook), we spent some Sunday afternoons banging it out too. But we were not musicians.

The structured training programme brought us through to all trades i.e. steelworks, welding, copper shop (which was actually pipe-works), machine shops, fitting section, maintenance shop and electrical shop. We learned a little of everything. We rephrased "Jack-of-all-Trade, Master-of-none" to "Jack-of-all-Trade, Master-of-ONE".

One interesting area was the maintenance shop. Some of us had the opportunity of repairing car engines. The company cars and heavy vehicles were maintained by this shop.

It was good experience for those who were there. There were also occasions where repair / maintenance works were done in senior officers' / managers' residences as these residences were provided by Keppel (a privilege inherited from the Singapore Harbour Board days).

Fire fighting & safety training was done at the PSA Fire station at Tanjong Pagar (Gate 2). We spent one week there attending classroom lessons on basic theory of fire fighting and safety practices. The final day was practical fire fighting, running and retrieving fire hoses, rescue of casualties, etc.

A few of us volunteered to serve National Service (NS) early by joining the People's Defence Force part time. We were posted to Beach Road Camp (16th PDF) lead by (Members of Parliament who were volunteers) Mr Othman Wok & Mr Fong Sip Chee. Basic Military Training was only 2 weeks of full time field training at Maju Camp, Ulu Pandan. We used to change into our army uniform and walked through the workshops & time office when we needed to report for evening trainings. This attracted attention. Then we realised there were others doing the same – several skilled workers were also volunteer soldiers (not enlisted under NS). That was the start of my 12-year NS commitment as a part time NS man.

Third year onwards, overtime work was allowed. Those needing the extra money started to take the opportunity to work over-time. By and by, apprentices became more experienced and more familiar with the shipyard environment, the port area and the anchorages. A first time major conversion (the MV "KARANJA") – Keppel lost money despite being the highest value job ever taken of \$5 million. Cleaning was done by women. The trade was known as "long-sai", translated from alongside (which meant ships berthing alongside the wharves). There was one young cleaner (in fact the youngest). She attracted a lot of attention in the yard and was nicknamed "Miss Karanja".

There was an accident onboard a BP (British Petroleum) tanker undergoing repair berthed at the main wharf. The CO-2 extinguishing system for the engine room was activated by accident. About 30 workers were affected and became unconscious. The response from Keppel was swift. A temporary access was gas-cut on the side-shell of the engine room for the rescue operation. Senior Officers' / Managers' personal cars were used to ferry the casualties to Singapore General Hospital at Outram Road.

Part of the third year I was attached to the Tanjong Pagar yard. Not much activity in this yard. Often, workers and apprentices were on "stand-by". But when there was work, overtime was expected. We did reasonably well in terms of our Friday pay packet. We became less thrifty. This was where I experienced welding inside double bottom tanks of small vessels.

Lunch breaks at Tanjong Pagar yard were interesting. Workers gathered forming a circle and kicking the sepak takraw rattan ball to each other. The circle grew bigger when more started joining after their lunches. There were very skilful ones especially the Malay welders.

In those days, different trades were having majority by race or dialect group. In Tanjong Pagar yard, welders were mainly Malays. Generally in Keppel, welders were mostly Hokiens, steelworkers / "platers" were mostly Cantonese (particularly the sub-cantonese dialect, "Sze-Yup"), machine shop & fitting section were Hainanese & Cantonese. Some were father & sons, uncles & nephews. The practice of bringing / introducing relatives and sons into Keppel was common. In fact, Keppel encouraged that (quoting "It goes in the blood"). It was common to see many with same surnames. Very likely, they were related.

Together in a group of about 7 apprentices, I was recalled back to the training centre during the third year, to embark on a pioneering project in building a steel launch. It was initiated / led by training instructor Mr Tan Yung. We had good experience in doing that. Mould lofting, marking out steel plate, gas cutting, sub-assembling, joined them to form the hull and so on. All these were done under shelter within the training centre workshop.

“Flying” – a brave act (this was mentioned in Mr Ron Pereira’s article too). I did not hear of anyone being caught although there were cases happening, even as new as my batch (I believe superiors those days were forgiving in that even those caught were let off with a verbal warning). “Flying” was getting out of the yard after clocking in and returned before the day ended to clock out. There were cases where a friend did the clocking in & out for the one “flying”.

“AWOL” – the brave ones did this. Physically in the yard but did not show up at work. He would be sleeping somewhere safe from being seen. There were such places those days, e.g. defunct workshops / foundry / furnace.

Gambling habits - some lost badly, resolved to loan sharks. The loan sharks hanged around outside the time office on Friday evenings. Every Friday was pay day. No debtors could escape their eyes. They collected the instalments on Fridays. The deal was “borrow 10, pay additional 2”. Borrow \$10, pay \$12 in 4 instalments of \$3. It seemed quite convenient for apprentices (but must know the limit though). It could ruin some.

In the 1970s, hippy culture and drug influence was affecting apprentices. Keeping long hair was a trend regardless whether one took drug or not. Apprentices would like to keep their long locks with a centre part (being “groovy”). Management was trying hard to discourage that. At Sembawang Shipyard, there was a case where one apprentice was caught having long hair and was booked and black-marked. The next day, he turned up to work with a bald hair cut. He was further reprimanded. That caused a sit-out by the fellow apprentices at the main gate. The Straits Times reported that with a photograph.

There was another newspaper case (but not about hair). The case involved Keppel apprentices. Someone from Keppel wrote an article to The Straits Times about apprentices’ compulsory overtime work on public holidays. It was published (the writer signed off as anonymous which was acceptable then). Keppel’s Personnel Manager Lawrence Mah got very mad. The next day, all apprentices were called up to attend an urgent meeting at the training centre to receive a “firing”. No one admitted (in fact to this day, we still do not know who wrote that). Lawrence used the words “Don’t hide under your mother’s skirt”.

The general learning process was very personal and individual. Each had his own way and style of learning. Working side by side with skilled workmen (we called them “si-fu”), it was a matter of interacting well. Often, we were left to do what we liked / wanted. I preferred to finish the work assigned to us and went on to walk around the ship and observed. There was plenty of good learning just by observing those big ships then (up to 40,000 DWT). Most of the works assigned to full-time workmen (also known as ticket men) were not difficult. The heavy steel repairs were all done by subcontractors.

I was attached to the steel workshop (more specialised) in the fourth year. Partnered with my fellow apprentice who was very interested and good at welding & gas cutting, we made a good team. I preferred to do the marking out onto the raw steel plates & materials for him to gas cut them. Together we assembled the pieces, tack welded and sent them to welding shop for final welding up. Sometimes, he would weld them up completely if it was a relatively small job. He was good at heat control and preventing distortions. We made a good working pair and praised ourselves that we were contributing to Keppel’s bottom line.

We worked like skilled workmen. The Charge-hand could safely leave us to handle the jobs he assigned.

This Charge-hand spoke little English but was good at Cantonese vulgarity (sze yup), could read plans/drawings, very skilful and could plan the work very well. Under his leadership, the department undertook the making of new parts for renewal of damaged / worn-off parts of coolers and condensers. From the existing damaged parts, he took measurements and made use of steel plates to fabricate the new replicas. The plate thicknesses were commonly more than an inch. He would plan the work so well that we just had to cut and form to shape according to his strict instructions. Edge preparations were allowed for, for welding. Methodically, he led us to form up the parts into shape, tack welded and attached temporary restraining steel pieces, and sent to the welding shop for the better skilled welders to complete the welding part. After welding, the next process was stress relieving (heat-treated and cooled, done at the foundry). It was a good experience for us apprentices.

A handful of us were given the chance of experiencing work in the offices i.e. commercial, billing, story writing, management services unit and drawing office during the fourth year. With another apprentice, I was posted to Singapore Slipway at Tanjong Rhu. I chose the drawing office. Singapore Slipway was then managed by Mr Chua Chor Teck (General Manager) and was into new shipbuilding. It was good opportunity for me. That was my start in ship-building.

On my first day at Singapore Slipway, I was given a task of drawing a new deckhouse for a new piling barge (vaguely remembering as Hull No. 14). I fumbled. Mr Chua laughed and said very nicely "No, not technical drawing, ship structure drawing". I realised what I knew from technical drawings were not all applicable. Started to learn from the beginning how to draw ship structure drawings. He showed me the past drawings within the office shelves & cupboards. I chanced upon plenty of information – rule books, his collection of technical books and engineering handbook, Mackrow's pocketbook for naval architects & shipbuilders (this one was very useful), RINA journals and so on. I was encouraged and very glad to be posted there. It was something new to lay hand on. From then, work became interesting and meaningful. I went beyond structure ship drawings. Had the chance of trying out mechanical drawings, like shafting arrangement & piping systems for tug boats and the opportunity to access electrical single line drawings too (not to design but to understand them). I had good mentors. Singapore Slipway contracted to build two RORO vessels, Hull No. 17 and Hull No. 18 (which were actually Landing Crafts). Keppel sent two good Senior Design Draughtsmen, one Hull (Mr Fong Seng Hong), one Mechanical (Mr Fok Yiu Piew), and Mr Tan Yung (from Training Centre) who was an ex-apprentice and ex-design draughtsman to Singapore Slipway to head start the drawings for these two vessels. Working under these mentors, I learned and gained invaluable experience / knowledge.

After our fourth year, we graduated and were awarded the apprenticeship certificate (about A3 size) in a simple ceremony. We seemed happy after all the "Blood, Sweat & Tears" (name of a US band popular then). Some went for celebrations (own account).

My fifth year was good. I was upgraded to Trainee Technician. For the first time, my pay was monthly (\$250 per month basic which was not bad including overtime). I stayed on at Singapore Slipway continuing with the same kind of work. By then, Mr Chua was promoted and returned to Keppel as General Manager and subsequently Managing Director. A new General Manager Mr Michael Koh Liang Hong took over from him.

At Singapore Slipway, I had the opportunity of supervising shipbuilding projects. I was given the task of supervising the outfitting works and accommodation furnishing works

of the two RORO vessels. Upon completion, I returned to the drawing office. Singapore Slipway drawing office was more than just producing drawings. We did not demarcate the work so fine. It did anything technical relating to shipbuilding e.g. new-ship estimates, equipment sourcing, reading shipbuilding technical specifications and contracts, design of barges, ship calculations, hydrostatics, stability booklets, inclining experiments & reports, liaison with classification societies and owners' representatives. There was plenty of opportunity to try new things. Design works were done from scratch. It was challenging in that every aspects had to be done manually. Using the planimeter was one example.

Singapore Slipway gave me the opportunity of meeting many returning scholars joining Keppel as management trainees, and some students (studying overseas) returning for vacations who spent their time there for orientation / gaining experience. We had good exchange of knowledge and learned from each other. Many of these scholars (to name those I still can remember, i.e. Mr Choo Chiau Beng, Mr Chung Chee Kit, Mr Goh Boon Kiat, Mr Wong Shi Heng, Mr Tay Kim Hock, Mr Lee Kwang Mong, Mr David Chin, Mr Mah Chan Wah, Mr Joe Lee, and so on) succeeded holding good positions within Keppel.

This fifth and final year of my apprenticeship training was more like a normal working adult and trying to be an effective employee playing a part in contributing to the company's business. I became a shipbuilder at age 22.

After our apprenticeship, we went our separate ways and some of the routes taken included:

- Going to sea to become marine engineers, returning to shore with a Chief Engineer "ticket" to become classification surveyors, shipping superintendents, technical managers, ship operations managers, fleet maintenance managers and so on.
- Leaving for the UK for further studies and returning with a degree in Naval Architecture or Mechanical Engineering to become classification surveyors or plan approval engineers, shipyard managers, shipping superintendents, and so on.
- Reporting for full time National Service and on completion join other shipyards or other non-yard type of companies. Some returned to Keppel at a later stage. (One or two became regulars with the Navy.)
- Changing jobs to work for suppliers, achieving senior positions as General Managers, Sales / Marketing professionals, became head of foreign equipment makers' Singapore operations, and so on.
- Running their own companies (a few did this) or businesses.
- Migrating and became permanent residents of another country.
- Staying at Keppel till today with Keppel holding senior positions.

(I remember meeting one (Goh Hock Lye) of us in my later years who was GM (short for general manager) of a marine & engineering supporting services company. He said GM means General Mechanic, need to know and do everything. Ha-ha, this is where Apprenticeship comes in handy. We said "Once an apprentice, always an apprentice")

*Here ends my *story* Readers do pardon me if my story differs from theirs as I served my apprenticeship more than 40 years ago!*

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