

On track to be Singapore's rail custodian

Asia Rail Engineering seeks to be the principal track contractor for Singapore and the region beyond

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AFTER Singapore's MRT trains wind down at around midnight, Asia Rail Engineering's maintenance engineers step onto the tracks and work non-stop for nearly two-and-a-half hours. They replace timber sleepers, change out conductor rails, and install new tracks, so that the transport system is rejuvenated for yet another day's work.

Welcome to the society of ageing railways, where membership is permanent, says co-founder and engineering director Phillip Peachey. It is a never-ending cycle of rehabilitation, because tracks that have been put in all eventually age, adds the other co-founder and business director Manjit Sandhu.

The pair, with more than 60 years of civil engineering experience between them, first met in 2006 while working on the Boon Lay Extension project. Mr Sandhu was with infrastructure group Balfour Beatty at the time, when Mr Peachey was roped in as a consultant from his self-owned UK engineering firm to oversee installations. They met up several times throughout the next two years, finding and discussing gaps in Singapore's rail management industry.

"The intention was to initiate a business that would be adding value to the existing approach in the industry," recounted Mr Sandhu in an interview with *The Business Times*. There were the train operators, the foreign contractors to design and construct the system, and the labour suppliers. What was missing was a group of people to organise the manpower, to assist the big contractors in providing a similar or better quality of work more efficiently.

"We felt we were able to do that... We could do things in a cost-effective way that would give the big boys an advantage if they engaged our services," he recalled.

And that was exactly how Mr Sand-

hu and Mr Peachey got started, collectively sinking in half a million dollars into the rail management and consultancy venture late 2008.

Fast forward nearly seven years to today.

Revenue for the last financial year stood at more than S\$9.2 million, while the company currently has more than 160 skilled men on its payroll, consisting of a good mix of locals

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Mr Phillip Peachey

and expatriates. Its client list includes big names both locally and overseas, such as SBS Transit, SMRT Corporation, ST Engineering, Balfour Beatty, and Eiffage. Last November, it purchased its new headquarters in Midview City for S\$4.18 million, to accommodate increased operations.

Yet, things were certainly not right on track at the beginning. There were huge challenges as a fledgling company entering the industry's "fraternity of multinational corporations", said Mr Peachey. Operations in the first year yielded just S\$30,000 in revenue, and the founders drew about S\$2,500 monthly.

Their first client base was to be the public transport operators, decided the duo, but more questions than answers came with the resolution: How were we going to get noticed? How were we going to get work? Most importantly, how were we going to demonstrate our credibility and capability?

Mr Peachey remembered that there was "a bit of a method" in their approach. Having written a course ti-



Mr Peachey (left) and Mr Sandhu, with more than 60 years of civil engineering experience between them, first met in 2006 while working on the Boon Lay Extension project. PHOTO: ASIA RAIL ENGINEERING

tled "An appreciation of track design using the Hallade Method" for SMRT, they were given the opportunity to meet and teach some of the public transport operator's senior engineers.

"It enabled us to demonstrate our knowledge base to that level of engineers, and that was the level preparing to contract work out," he said.

"It also provided a forum for us to find out what their knowledge base was, so we could start targeting what we needed to target," he added.

From there on, the masterplan for Asia Rail Engineering grew and gradu-

ally took shape. With every project undertaken, the company carved out for itself a reputation for its superior technical capabilities, governed by an uncompromising focus on quality.

This proven track record gave them the confidence to undertake the replacement of timber bearers on the North-South and East-West Lines last year.

Involving the removal, transportation, and installation of 4.7-metre-long wooden pieces in excess of 200kg onto the delicate track infrastructure, it is a challenging project

that competitors have shied away from. Work on the railway turnouts - the point at which a train is diverted into another direction - is particularly complex with electrical components and other signalling mechanisms.

The engineering team has had to innovate its way out of physical constraints during the process, beginning with the lifting of the hefty wood pieces onto the viaduct. They started off with manual lifting through the stairwells, but abandoned the method after damaging the surrounding infrastructure.

After a bit of head-scratching, the team reconfigured some existing machinery to come up with an improved ladder hoist, customised specifically to their needs. It lifts up the wooden pieces easily, reduces the manpower needed by half, and can be set up and dissembled within 10 minutes. Put this together with a team of skilled engineers, and the end result is a project moving 16 months ahead of schedule.

Said Mr Peachey, who is used to thinking creatively to get around limitations in the system: "The methods used (to renew tracks) everywhere else don't apply in Singapore, it's almost unique... How do you semi-invent a new way to renew the rail infrastructure with just two-and-a-half hours each night? It's a very difficult conundrum to solve, but we came up with a solution."

"If you look now at everybody else's working methods, you will see that the original method statements were written by Asia Rail Engineering."

"They've copied our methods... which they do have to do, because our methods are the best methods," he noted with a laugh.

In the same spirit of pioneering innovation, the company has most recently invested nearly S\$80,000 in new technologies for replacing trackbeds. This is despite the fact that the project is not due to be announced until a year or two from now.

"Because we know how difficult it

is going to be, we've invested that sort of money into developing systems so we are able to do it," said the founders. "We're going to be ready for it."

Looking ahead in the near future, the company is aiming to be the principal track contractor for Singapore and even the region beyond. Up till now everybody else - the French, Germans, British, and Taiwanese - has built Singapore's railways, said Mr Peachey. "But it's never been a Singaporean company to build Singapore's railway."

Asia Rail Engineering is therefore building up its stature, to be the architect and caretaker of the tracks through which millions of Singaporeans travel each day. To leave behind a company that is capable of constructing and maintaining the railways of Singapore would be something to be proud of, said the founders.

"With the infrastructure growing to an extent that Singapore is going to have as many railways as other countries, except on a small island... That's all going to take a lot of looking after."

THE BLUEPRINT FOR SUCCESS



This company is one of the 14 finalists of the Emerging Enterprise Award 2015. Jointly presented by *The Business Times* and OCBC Bank, the Emerging Enterprise Award 2015 recognises promising enterprises and startups which are up to 10 years old and have an annual turnover of S\$15 million or less. It is supported by RSM Chio Lim, MasterCard, Singtel, ACORN Marketing & Research Consultants, INSEAD and SPRING Singapore. The winners will be unveiled at a gala dinner on September 23.