

Memoir on USA Projects

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In 1983, the Kinki Sharyo USA Project Team was targeting either Pittsburgh (PAT) or San Jose (VTA). One day, I received the technical specification for Boston (MBTA) project from my boss. He said “the USA Project Team is now very busy preparing the technical proposals on other projects. Read this, but you do not need to worry about this because it is not our target”. The contents of the technical specification were out of sight. The weight limitation was very restrictive and a severe penalty would be assessed if failed. While the vehicle clearance envelop was fuzzy, the construction clearance was the car builder’s responsibility. Noise requirements were very tight. We had no knowledge of RMSH (Reliability, Maintainability, Safety and Human factor) requirements. All test and inspection procedures, maintenance manuals, and parts catalogs were required to be submitted. All of these requirements were new to us and I thought it would be a mess if we got this project. I asked our cost estimate group not to get this job. The bid was closed in August. The exchange rate at that time was ¥300=US\$1 and the bid price did not impact the cost of the Japanese portion. As a result, we were the low bidder and consequently it was determined that the USA Project Team was to follow this project.

I was ordered to visit Boston for 2 weeks to explain the Kinki Sharyo drawing management system in January, 1984. During the 2 weeks I was assigned as the Project Manager. I could not imagine my stay in Boston would continue for over 22 years.

In December 1985, the first proto car was delivered to the MBTA car house. This car was tested in our Osaka factory for many days and also confirmed to run before delivery. Everybody was so nervous to take a look at our first car. The pantograph was raised to the catenary and the master controller was switched to forward. Nothing happened and the car did not move. This car was a so called “Surface Rail Car” and it equipped with computers using the latest chopper control technology. Debugging the computer software was not enough to guarantee function before delivery. We asked the service engineers from the propulsion supplier to fix the problem. 2 hours later the car moved. It was to my shame to hear “even a Japanese car does not work”.

I expected our Head Office would ask me to come back to Osaka after the 2 year warranty expired. One of the most terrible things for the foreign resident is the upper management is retired or transferred to the different position during my residency and no one can recommend for me to come back to Japan. When 6 years passed, I decided to do business in the USA with my own style and I asked the top

management in Osaka to establish a subsidiary company in the USA. In June 1991, Kinkisharyo (USA) Inc. was established.

During the next 4 years after establishment of the new company, we had no additional work and were just using our capital funds. We struggled to find a job such as modification of toilet and doors for Alaska passenger coaches which were supplied by a Korean carbuilder. We submitted lot of bids but almost all of them we got Silver Metals (2nd low bidder). During this period, we established a computerized accounting system, reviewed trading company’s functions, bond/insurance research, etc. It is important to improve the accuracy of cost analysis and to know our own abilities. We can find out where the risk would exist and how the contingency would be by reading the technical specification word by word in detail. This way, we can recognize how not to lose money or at least to minimize the risk. Detailed survey in advance made us confident even if we could not get awarded.

In 1994, we were awarded 40 LRVs from DART (Dallas) beating Siemens and Breda. Also, MBTA ordered us to supply an additional 20 LRVs. After this success, we got awards from NJT, VTA and DART (option), and recently we have received contracts from Phoenix and Seattle.

In 1996, we received a contract from NJT to supply 70% Low Floor LRVs (45 cars). This project is a so called DBOM (Design, Build, Operate and Maintain) which includes all civil works, stations, etc. as well as operation and maintenance of the LRVs. We had no experience to perform maintenance activities in the past. We tried to get any kind of information, such as annual budget from MBTA and to receive cost estimation even from our competitors. In order to finalize our bid price, we had a number of meetings with our partner, Raytheon.

Technically speaking, this LRV consists of 2 articulations and 3 trucks which was our first experience to design. The biggest problem was to control the movement of the middle car. Current configuration was developed by Mr. Sugimoto of Kinkisharyo (USA) who was challenged by unknown factors. I think the challenging spirit is the basis of Kinki Sharyo engineering development.

Finally, I would like to express my sincere appreciation to everybody that I could work with and for that allowed me to be able to work for Kinki Sharyo for 43 years.