## The Panama Canal – An Engineering Marvel



by Ir. Chin Mee Poon

THE Panama Canal is without a doubt, Panama's biggest tourist attraction, but that is not the reason why the Canal is also Panama's biggest foreign exchange earner. More than 14,700 ships pass through the Canal every year, each paying a sum for the use of the Canal according to its weight. A gigantic container ship may pay as much as US\$400,000. On the other hand, if you decide to swim through the Canal, you will have to pay too, as Richard Halliburton did in 1928 when he was levied US\$0.36 for swimming through the Canal, the lowest collection on record.

The Panama Canal, often touted as one of the greatest engineering marvels, was constructed by the Americans in less than a decade just before the first World War. The first ship sailed through the Canal on 15 August 1914. The Americans continued to manage the Canal, and at the same time, interfered in Panama's internal affairs with its military force stationed in the canal zone until the last day of the second millennium after Christ. Hardly six years had passed after Panama took over full ownership of the Canal before it decided to embark on an ambitious, US\$5 billion project to widen and deepen existing navigation channels and construct a new set of locks to accommodate larger ships.

As it is, the 80km long Canal has three double locks, two on the Pacific side and one on the Caribbean side. Between the locks is a huge artificial lake which, at a higher level, supplies the water needed for the operation of the locks by gravity.

The idea of a canal cutting across the isthmus was mooted as far back as 1524 by King Charles V of Spain shortly after Christopher Columbus' "discovery" and Spain's successfully colonisation of most of the Americas. It was the French, led by the prominent engineer Ferdinand de Lesseps who had just successfully constructed the Suez Canal and go on to construct landmarks such as the Eiffel Tower of Paris and the Statue of Liberty of New York City, who first made a serious attempt to translate that dream into reality in 1881. But their effort was thwarted by yellow fever, malaria, insurmountable construction problems and financial mismanagement. A total of 22,000 workers died and the company went bankrupt in 1889.

At that time, Panama was still part of Columbia. It declared independence from Columbia on 3 November 1903. More than half a century before that, Columbia permitted the US to construct a railway across the isthmus that greatly eased the movement of tens of thousands of people during the California Gold Rush from the east

coast of the US to the west coast to avoid the hostile Native Americans living in the central states. The presence of this railway was perhaps one of the considerations that helped persuade the US government to decide in favour of Panama against its competitor Nicaragua for the location of the canal.

My wife and I visited two of the locks, one at each end of the Canal, during our recent trip to Central America and the West Caribbean. We also took the train ride from Panama City to Colon. A cruise on Lake Gatun, the artificial lake between the locks, gave us a memorable introduction to the unique wildlife of Central America.

