

The Institute of Occupational Health and Safety (HK) – AGM cum Annual Dinner
Speech by Ir Frank Chan, JP, DEMS - 26 April 2013

Good evening Chairman Richard, distinguished guests, ladies and gentlemen:

For better or worse, humanity never ceases to learn. There are all kinds of way to learn but on matters relating to life and death, there is no better way than to learn from history. After all, safety is not to be learned by accident. Back in 1991, Hong Kong construction industry's accident rate was as high as 364 per 1,000 workers. Sadly, more than one third of our work force got injured at that time. Since then, we have implemented all kinds of measures with a view to safeguarding workers from harm. Twenty years down the road, the accident rate was reduced to 49.7 per 1,000 workers by 2011, with a massive 86% improvement.

But our best is not good enough. As compared with 4.5 per 1,000 workers in Singapore and 4.2 per 1,000 workers in the United Kingdom, our accident rate of 49.7 per 1,000 workers is far too high. Despite minor variations in calculation methodology, a ten-fold difference is beyond doubt a conscience call for us all.

A closer examination of our safety performance in 2011 reveals a total of 40,578 industrial accidents, and among them 191 fatalities. That means an injury every 13 minutes and death every two days, leaving our society with many broken hearts and devastated families. During the 12 years of war in Afghanistan since 2001, a total of 2,180 US soldiers perished, translating into one fatality every two days. It is difficult to imagine the risk of workers going to work here in Hong Kong is as dangerous as US soldiers going to war in Afghanistan. Surely, there is a lot to be learned and much to be done. At a time when the Hong Kong construction industry is expecting another decade of prosperity ahead, we need to sustain our on-going efforts, heighten safety awareness and cultivate a deep-rooted safety culture.

Tonight, I would like to share with you a few observations and thoughts. The first is about infertility that leads to innovation of reproductive technology. Sir Robert Edwards, a Nobel

Laureate recognised worldwide for in vitro fertilization, started his research in 1960s. It took him near twenty years' labour to give birth to the world's first test-tube baby in 1978.

Twenty five years since then, five million test tube babies have been born across the globe, making dreams come true for 200,000 infertile couples every year and bringing hope to many families. However, occupational accidents killed more than 320,000 people worldwide each year. Occupational accident alone has more than offset the number of lives created in test tubes. While everybody here is aware of the death of Mrs. Margaret Thatcher, not many of us would know that Sir Robert Edwards passed away two days after her.

In the history of safety engineering, innovations are plenty. What is now proven was once only imagined. The first civilian hard hat, which is a prototype of modern safety helmet, was said to be invented in 1912 by Franz Kafka, a simple innovation that becomes a must for construction workers nowadays. Earth leakage circuit breaker, a device that cuts off electricity supply upon detection of electricity leakage, was developed by Henri Rubin in 1955 to prevent innocent people from being electrocuted. These innovative and yet simple devices have saved millions of lives. These are vivid examples how hardware innovations have contributed for better occupational safety. However, we have to appreciate that hardware alone could not be the answer.

During the 18th century, the British Government transported large numbers of convicts to Australia. One of the primary reasons for the British settlement was to alleviate pressure on their overcrowded prisons back home. The British Government out-sourced the operation and the first voyage ended with a tragic mortality rate of 42%. Out of a total of 1006 convicts, 267 died at sea and another 150 perished upon arrival. The British government then introduced an incentive scheme by linking payment with the survival rate.

Responding to the change in payment terms, the shipping contractor implemented a number of initiatives to improve the hygiene and ventilation for the convicts on board. Arrangement was also made for convicts to undertake physical exercises throughout the

voyage. What gets measured gets done, innovation in software such as contract management and supervision in this particular case, succeeded in reducing the mortality rate drastically from 42% to 1% for subsequent voyages.

The remarkable reduction of mortality rate for the shipment of convicts is indeed a breakthrough in the 18th century. But the maritime industry carries on. With continuous improvement over two hundred years, the mortality rate of sea travel is now less than one in every ten million passenger voyages. Even with such a high industry standard, maritime safety is not guaranteed. January last year, the Italian cruise liner Costa Concordia, carrying some 4,200 passengers, struck a reef and capsized when it maneuvered too close to shore. It is not the first time the captain chose to deviate from the computer-programmed route to perform near-shore salute to local islanders. But it was the last time those 32 perished were ever seen alive.

If a shipwreck in Italy is too remote for us to feel the pain and sorrow, let's zoom back to Hong Kong. Last October, two ferries collided off Lamma Island and 39 people died. Subsequent inquiries revealed a host of faults and shortcomings. Despite the many differences between the two cases, failure of the captains is nonetheless common, highlighting the importance of safety leadership and human factor.

As we all understand, safety does not come naturally and could not be taken for granted. Safety is a trinity of hardware, software and human-ware. Similar to the birth of a child, safety is the end result of all the labour, dedication and contribution of everyone involved. Life can only be lived once. That's why safety is of vital importance to every person.

In closing, may I share with you a quote from Sir Brian Appleton. After investigating into the explosion of the Piper Alpha oil platform at the North Sea that killed 167 people in 1988, he remarked that "Safety is not an intellectual exercise to keep us in work. It is a matter of life and death. It is the sum of our contributions to safety management that determines whether the people we work with live or die."

Thank you.

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