

LIFTS ARE DESIGNED TO BE “FAIL-SAFE”: HIGHLIGHTING THE BASIC SAFETY FEATURES OF LIFTS

WE refer to the news reports on 20 February 2013 whereby a woman was killed when a lift plunged five floors after its cable snapped in a 10-storey apartment block at the Lumut naval base in Perak.

It is shocking to note that yet another public facility had failed to function and killed a woman passenger. We should be thankful the lift was not fully occupied. The loss of a single life is horrible enough. The question that begs to be asked is why did this incident happen? Could we have taken necessary precaution to ensure such incidents do not occur?

The answer is a resounding ‘yes’ and it hinges on a good and committed maintenance programme. For centuries, lifts have proven to be effective vertical transportation systems and as engineers we can attest to this. We are aware that poor maintenance and even negligence can result in mishaps but we do have preventive measures that can save lives.

Let us take a closer look at the safety features of a lift. Each lift has a minimum of five hoisting cables and in the event one cable snaps the remainder four would ensure safe travel in the lift. So why did all five cables give way simultaneously? This wire rope must be properly installed, aligned and calibrated by an experienced technician to function effectively. Even with the snapped hoisting ropes the free falling lift car would be stopped by the mechanical brakes on the main guide rails as the last line of defence before it slammed on the buffer in the pit. What baffles us is how all these safety features failed to work.

The mechanical and material specialists will be able to give their professional and analytical views on this impulsive force which was so powerful that all strands of wire rope failed instantly and all at the same time. We can definitely speculate that poor maintenance or even no maintenance could be the cause for this incident. The persons assigned to conduct regular maintenance work should provide a definitive explanation on the level of maintenance that has been carried out.

More importantly, whether or not the quality of maintenance service provided was below par is the main concern. Were skilled technicians assigned to carry out maintenance works? Were genuine spare parts being used? If the answers are NO, it is only right that the appropriate action in accordance with the relevant regulations be taken against the maintenance supplier.

We also believe that the Department of Occupational Safety and Health (DOSH) should do their part to ensure that only authorised lift vendors are registered as maintenance companies, and only such maintenance companies are allowed to perform maintenance works. We further urge the regulatory agency to oversee all such maintenance companies to ensure only the competent and qualified individuals are appointed to carry out all maintenance work and to certify the work done at the site.

We understand that there is a shortage of competent and qualified persons specialising in lift installation and maintenance work. Hence, we strongly recommend DOSH to certify more of such persons under the National Occupational Skill Standard (NOSS).

The IEM hopes that proper investigations will be carried out to determine the cause of the mishap. If there is a need, the IEM will be pleased to offer its services. ■

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