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PACIFIC ASIA LIFT AND ESCALATOR ASSOCIATION

This Newsletter is brought to you by the Management Committee of PALEA

The aim of this newsletter is as follows:-

- To keep members informed of current and future developments in local and international standards, codes and regulations that impact our industry.
- To update the members regarding the latest news happening in our industry, in Asia Pacific countries.
- To form a platform to discuss and exchange ideas relating to:
 - Local codes
 - o International codes
 - Safety to the users and the technicians
 - Risk Management for new technologies

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President's Message.

Lift codes are certainly going through exciting times at the moment with the recent ballot of the ISO committee accepting the adoption of EN81parts 20 & 50 as the basis of the new ISO prescriptive code. At this stage the standard will be supplemented by a technical specification that will provide guidance to using the new ISO standards in areas such as North America and Japan, which have long standing standards that have specific differences from new ISO prescriptive standards. A project to develop a new more easily recognisable numbering system for ISO standards for lifts and escalators was proposed at the last ISO plenary meeting South Africa so the numbering of the new standards has not yet been set. Therefore the standards are, at this moment, simply identified as ISO Part X (Lifts for the transport of passengers and goods), ISO Part Y (Examinations and tests) and ISO TS Z (Technical specification). The current "roadmap" indicates that the first functional documents will be published late in 2017 for use as national codes with three year revisions to progressively reduce regional differences resulting in a largely harmonised document and the elimination of the technical specification by the middle of the next decade.

The 26th ISO TC178 plenary committee meeting chaired by Mr Christian De Mas Latrie was held in Pretoria, South Africa last October. Shortly before the meeting Mr De Mas Latrie was reconfirmed as the Chairman of the ISO/TC178 committee for another term by a unanimous vote. The meeting was preceded by a number of working group meetings including WG4 (Lift safety requirements), WG5 (Escalator safety requirements) and WG6 (evacuation and Lift dimensions). The plenary meeting was attended by 39 delegates from 15 countries as well as PALEA and was hosted by the SABS. As a result of vigorous and meaningful debate 28 new resolutions were passed during the meeting. The next plenary meeting will be held in Sydney, Australia in April 2016 and the following meeting will be held in India around October 2017, demonstrating the increased participation and importance of ISO code in Asia Pacific.

The 2014 PALEA AGM was held in conjunction the South Korean Elevator EXPO in Seoul including a seminar which was sponsored by KESI. The KESI elevator Expo was a huge success being much larger the last Expo with all the major manufacturers exhibiting a wide range of new products. The seminar was well attended and in addition to presentations by KESI and PALEA representatives there were also presentations made a number of international speakers which provided a wide range of interesting topics from elevator experts from around the world. The AGM was held during the Expo and was well attended by a large majority of members and a number of guests.

The 2015 PALEA AGM was held in Kuala Lumpur in October 2015 and was to coincide with the 30th anniversary of MALEA. MALEA and PALEA have a long standing and close relationship and all of us at PALEA are very excited and proud to play some role in this very important milestone that is been celebrated by our friends at MALEA.

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PALEA held information seminars in different Asian countries

Year - 2014

- Vietnam
- Myanmar
- Hong Kong
- South Korea(AGM)
- China

Year - 2015

- Malaysia
- Vietnam
- India
- Malaysia(AGM)
- Thailand



PALEA Seminar in Vietnam



Statue of Nelson Mandela - Pretoria, South Africa

JAPAN CODE DEVELOPMENTS

Safety devices to be standardized as JIS/ Safety examination for governors, etc. to be obligated under Japanese law

The Ministry of Land, Infrastructure and Transport (MLIT) made a decision, for a part of safety devices of elevators, to adopt the certification system by notified examination bodies based on the requirements of JIS (voluntary standards to be developed) as one of the methods of safety examination.

The "Elevator and Escalator Safety Examination Working Group" established by MLIT, as the result of its continuous review, has issued its report for the examination system of safety devices to prevent serious accidents.

This report has adopted two methods of safety examination for the "safety devices to operate at the final stage of preventing serious accidents" as follows:

- a) Safety devices for which a high level evaluation is required: Certification by the Minister of MLIT
- b) Safety devices with generalized technical elements: Certification by notified examination bodies based on the requirements of JIS upon making them legally effective by means of incorporating them into the Building Standard Law of Japan through the quotation by public notice of MLIT.

The "Unintended Car Movement Protection Means (UCMP)" has already been subject to the method of "Certification by Minister of MLIT".

The subjects of category (b) above (Certification by notified examination bodies) would be three safety devices: governors, safety gears and buffers. The stopping devices incorporating software would be the subject of category (a) above (Certification by Minister of MLIT), because it is difficult to evaluate the secure activation and reliability of them.

Other devices for which a high revel evaluation is required would also be the subject of category (a) above (Certification by Minister of MLIT). The draft JIS for safety devices will be made by Japanese Elevator Association (JEA).

In order to adopt the system of safety examination above, the amendment of government ordinance is required. Safety devices to be standardized as JISGenerally speaking, the amendment of government ordinance will have approximately 2 years grace period to become effective from its issue.

The details of certification system by notified examination bodies and new certification system by the Minister of MLIT will be considered and be determined in the near future.

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Hong Kong Code Developments

1. Remote Monitoring System (RMS) for Maintenance

To try and help alleviate the issue of labour shortage in Hong Kong, a pilot project was run in a government building between a Lift Contractor and the Government Department, Architectural Services Department (ASD) to determine whether the remote monitoring system could reduce the maintenance frequency.

Discussions regarding the findings of the pilot project were held between ASD and LECA during the meeting with Hong Kong Federation of Electrical and Mechanical Contractors Limited (HKFEMC), held on 13 February 2015.

The initial findings were that adoption of RMS was good for lift installations on foot bridges, or in remote areas. However, the opinion was that the adoption of RMS would not significantly help reduce the numbers of maintenance personnel required for future maintenance.

2. Car Top Control Inspection / Normal Switch Key

The three year grace period instructed by the Hong Kong Labour Department in March 2012 for installing a switch lock or similar device on the Inspection / Normal switches of the Car Top Control stations of lifts, came into effect in March 2015.

The instruction for carrying out this function is included in the Hong Kong Construction Industry Council Guideline on Safety of Lift Shaft Works, section 8.4. Lift Contractors who do not comply with this instruction are liable to a heavy fine of HKD 200'000 (or 6 months imprisonment).

3. Proposed amendments to EMSD Design Code for L & E's.(2012 Edition)

EMSD have circulated draft proposals to all LECA and REECAL members for a number of amendments to the Design Code (2012 Edition). Consolidation for last draft was 30 October 2015.

Potential field test changes: Escalator may require load test every 3 years

Potential escalator design changes on floor cover: safety switches to monitor the proper closure of 2nd floor cover and all floor covers to be tied-down (screw fixing).

Singapore Code Developments

Singapore Code of Practice for Lifts SS550:2009

The following additions to SS550:2009 come into effect in 2015.

1. Unintended Car Movement Protection (UCMP)

All traction lifts where the first set of either building or structural plans are submitted to the Commissioner of Building Control for approval on or after 1 Feb 2015, must have UCMP installed.

Details on the means to detect and stop unintended car movement away from the landing with the landing and car doors not in the locked and closed position are described in clause 8.4 of SS550:2009.

2. Uninterrupted Power Supply (UPS)

Presently, SS550 requires the installation of emergency battery operated power supply to comply with SS209:1996 - Specification for battery operated emergency power supply for lighting, ventilation and alarm bell of lifts (EBOPS).

However, SS209:1996 will be withdrawn, and UPS complying with IEC 62040-1 must be used in place of EBOPS. All passenger lifts where the first set of either building or structural plans are submitted to the Commissioner of Building Control for approval on or after 1 Nov 2015, must have UPS as an emergency power supply for lighting, ventilation, alarm and intercom systems.

Singapore Code of Practice for Escalators CP15:2004.

1. Review of Escalator Code CP15:2004

CP15:2004 is currently under review and looking to be based on EN115-1:2008 +A1:2010.

The final stages of review have been reached, and all Lift Companies have been requested to provide their comments by 18 June 2015 on all the Annexes from A to L in EN115-1:2008 +A1:2010. Official release date the revised CP15 is not yet known.

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EN 81-20 and EN 81-50 — Some of the Main Enhanced Safety Features.

Safety For Passengers.

- Protection against Unintended Car Movement (UCM), with open doors.
 - O Detect the unintended car movement, when the car door is open or landing door is unlocked. Stop the lift within a limited distance
- Higher requirements for strength of landing and car doors
 - To withstand static force of 1000N in any point, without significant damage affecting door normal function. Addition of door retainers, enable to maintain the mechanical integrity of the door, if the main guiding system fails
 - o All doors, including frames of >150mm wide, to be tested with a soft pendulum shock device. Door with glass to be tested also with hard pendulum shock device (as current requirement)
- Preventing door striking the passengers when entering or leaving the lift car
 - Kinetic energy of the doors (car and landing) is limited to 10J
 - o Non-contact detection device to re-open the door before striking the passenger
- Doors with glass
 - o Limiting the opening force to 150N and to stop the door in the event of an obstruction
 - The thickness of \leq 20mm for the front edge of the leading glass panel(s)
 - Children finger protection by
 - Making the glass opaque minimum height of 1,10m, or
 - Sensing the presence of fingers at least to 1,60m height, or
 - Limiting the gap between door panel and frame to 4mm
- Higher requirements for strength of car walls
 - Withstand 1000N without visual deformation
- Higher level of car lighting
 - o Car lighting of ≥100 lux (instead of 50 lux), with two lamps connected in parallel
 - o Emergency lighting of ≥5 lux for ≥1hr
 - o Lighting to be measured on the control devices and also 1,0m from the car floor
- Higher requirements for rescue of trapped persons
 - Rescue crew to be able to move the car in all conditions, including the car balanced situation (±10% of rated load)
- Higher requirements for carload capacity.
 - The weight of handling devices are included in the rated load; OR
 - The weight of handling devices shall be considered separately from the rated load
 - Handling devices are not transported with the load;
 - The car sling, the car safety gear, the guide rails, the machine brake, traction, hydraulic ram, the UCM protection means, etc., shall be based on the total load of rated load plus weight of handling devices

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Safety For Workers.

Higher requirements for refuge spaces on the car roof

- o One refuge space for each person who may be present on the car roof
- Sign on car roof stating the maximum number of persons allowed and safe posture
- Sign on counterweight screen giving the distance between the counterweight and the buffer (run-by) when the car is at the highest landing

• New requirements for inspection control

- o Blue "Run" button added to act together with up and down buttons
- o Push buttons shall comply to EN/IEC 60947-5-1
- Button colors derived from EN/IEC 60204-1
- o Inspection speed shall not exceed 0,30m/s when vertical distance above any standing area on the car roof or in the pit is \leq 2,0 m

Higher requirements for access to pit and machine rooms, e.g. ladders

- Access to pits >2.5m deep must be by stairs
- o Pit access ladders to be provided with a safety contact where necessary
- o Normative text in clauses, combined with a new normative annex giving the possible ladder types

Higher requirements for well lighting

- o 50 lux at 1.0m above the car roof and pit floor.20 lux in any other area in the well
- Sufficient number of lamps in the well. Additional lamp(s) may be fixed on the car roof as a part of the well lighting system
- o Emergency light on the car roof, 5 lux for 1hr on alarm button and 1m from floor in center of car roof

Machinery spaces and machine room

- o 200 lux at places where persons can work
- o 50 lux at places where persons move between working areas

Machinery cabinet

- 200 lux at places where persons can work
- Emergency and test panels
 - o 200 lux at devices

Protection against electric shock

o Protection against electrical shock shall comply with HD/IEC 60364-4-41 and EN 50274.

Additional protection by means of 30 mA RCD

 Socket outlets . Control circuits for landing controls and indicators and the safety chain having higher voltage than 50 V AC, and

Circuits on the lift car having higher voltage than 50 V AC

Labeling for electrical hazards

Seasons Greetings

From PALEA Management Committee.