BEST PRACTICE

LOCATION:	**Company-wide**	**ARTICLE YEAR**	**2018**
ACTIVITY:	**Lifting**	**COMPANY:**	**FM Conway**
SUB ACTIVITY:	**No Sub Activity Available**	**COMPANY LOCATION:**	**Vestry Road**
BEST PRACTICE No:	**BP2023**	**COMPANY TEL:**	**0000**
COUNTRY OF ORIGIN:			

TITLE

Tower light raise/lower

ARTICLE

DESCRIPTION

FM Conway undertook an investigation following an incident where a tower light had overturned injuring an operative and falling close to a pedestrian area open to the public.

Prior to the accident, the tower light had been moved a short distance but the stabilising legs had not been not redeployed, even though the light was extended. It is believed that when an operative leaned on the mast it toppled over. It was also noted that, on this model, the handbrake was not connected to the mast – this safety mechanism automatically lowers the mast when the handbrake is released. However, the handbrake had been applied in this instance, so this was not a contributory factor.

Initially, the cause of the accident was identified as the failure to lower the stabiliser legs, but on further reflection, it was changed to design failure. The switch that allows the tower light to be raised should not function if the stabilisers are not deployed. Similarly, if the stabilisers are raised, the light should lower automatically.

As an initial measure, it was decided to suspend the use of any other equipment that did not have the handbrake mechanism connected to the mast and to retrofit older models with this safety device. Whilst this was being undertaken the workshops were asked to review other options that would prevent the mast being raised if the stabilisers were not deployed.

Research revealed no existing mechanism that worked in conjunction with the stabilisers. Following a period of trial and error, the workshops demonstrated a prototype based on location sensors that would not allow the mast to be raised until the legs were deployed. It would also lower the mast to a safe position if the stabilisers were raised. Suppliers were contacted and the information shared with them. The FM Conway specification for new lighting towers was updated to include this feature.

Trime UK, a manufacturer, took the concept and modified it. FM Conway have subsequently purchased 18 lighting towers from them and retrofitted existing towers to meet this specification.

BENEFITS

- Potential hazard from toppling light towers removed
- Safer environment for anyone working under temporary lighting
- Fail safe system being adopted by manufacturers
- Adoption of 'Safer by Design' principles.

ARTICLE IMAGES