

NATIONAL LIFT TOWER

Welcome...

Welcome to the NLT Association's first issue of its bi-annual newsletter, established to keep the industry up to date with the activities at the National Lift Tower. As well as keeping you abreast of developments at the tower, this newsletter will also inform you about forthcoming events, courses and professional development opportunities to be held at this exciting new venue.

It has been an eventful start to the re-opening of the tower. Since it was privately acquired at the end of 2008, a significant programme of works has been undertaken to bring the tower back to its former glory. Four of the six lift shafts are now back in operation and the lifts and machine rooms have been refurbished. Additionally, both the first and second levels have been restored and particularly welcome was the reconnection of the heating system earlier in the year!

A security system has been installed to provide controlled access to the varying facilities in the tower and the exterior renovations are now also finished, complete with jetwashed concrete. All of this has established the lift tower as one of the best views for miles around!

I trust that you will find this newsletter informative and the association a useful addition to the other activities already available to the industry. Feedback is always welcome and I look forward to seeing you at the first event in November.

Richard Taylor
Editor
September 2010



TRAINING & THE TOWER

BY DAVID COOPER
BSC(HONS), MSC, CENG, FRSA, FIET, FCIBSE



I received a message from Richard Taylor asking me to write a few words about training in the industry and my experiences with the Lift Academy.

It was extremely fortunate that I had been to Tamworth that week to investigate an incident and my train back to London went via Northampton. I looked back as the train went south towards Milton Keynes and the enormity of the presence that the Tower has in Northampton was once again impressed on my mind.

To many she holds great memories. I recall organising a Lift Academy trip to the Tower and receiving a call from an industry colleague asking if he could tag along as he had spend some time there as a trainee. This is a man that I hold in great respect and is a well respected competitor of mine in the consultancy world. I was delighted to smuggle him in as a trainee!

In years gone by the Tower was a symbol of the UK lift industry and its ability to develop and test new products. Many respected engineers cut their teeth at this facility. Then she became a symbol of political cutbacks where the only live component in her was the annual livening up of the Christmas Lights. Then a rumour of concrete cancer looked like she wouldn't see a return to her former glory but how wrong could that prophecy be!

When I started the Lift Academy I had no idea how successful it would be. I wanted to present basic lift engineering to the future engineers of our industry. I knew the industry needed help. I also knew that I had sat through meetings where Politicians said we want to help but sadly we can't. I knew that the only way to drive it forward was to give it a try. We live and operate in a stupid scenario. Those who train apprentices live in fear that they will lose them to poachers, those whom have become accustomed to poaching have no morals and are allowed to exist. Larger employers train staff and put fish into one pond but remove them from another. The situation is not a healthy one! Perhaps one day Politicians will listen. "Politicians" and "listen" in the same sentence – I know it's a long shot!

I learnt all this from a man who was paid to promote apprenticeships but being part of a Government quango spent most of his time having lunch with people like me and telling them the same story time and time again! On the bright side it was a good lunch! (and I paid!)

There are those in the industry that have a passion for its future. I am lucky with the Lift Academy to know many of those people. The Tower deserves to survive and will survive because of people with that passion. Its association with Northampton and the University will see her through and in years to come people will once again be saying "I learnt my trade there". God Bless those that saved her.

THE LIFT TOWER AS A STUDENT

BY SUNITA GODHANIA

Last year, just as the modernisation works at the National Lift Tower began, students from Northampton University were given an opportunity to look around. The biggest surprise was to see that the tower is totally surrounded by residential properties, having lain derelict for over a decade, since the Express Lift Company closed.

The tower has several shafts serving a variety of purposes, the engineers lift being the only lift in operation when we visited. This particular lift runs from top to bottom of the tower and enables access to all of the motor rooms. The tour enabled us to see both the high and medium speed shafts and their motor rooms, the training shafts, drop test shaft, hydraulic shaft and open shaft. The open shaft was particularly interesting, being just a void in the tower, the purpose of which is for the development of new lifts, their structures and shafts. Of most relevance for the students are the training shafts and the drop test shaft, which will be invaluable for both students and manufacturers alike; it was here in the Express days that ILE carried out the VG safety gear test in association with David Cameron. More recently ILE have donated much of the equipment for the engineers lift.

THE FUTURE PLANS FOR THE TOWER

BY ED WRIGHT

There are three phases to the project at the tower. The first phase was to rescue this iconic building from demolition. This was achieved at the end of 2008. The second phase was to complete renovation works and put the building back in use as a working lift testing tower. This is where we are now, with several projects already underway on the premises

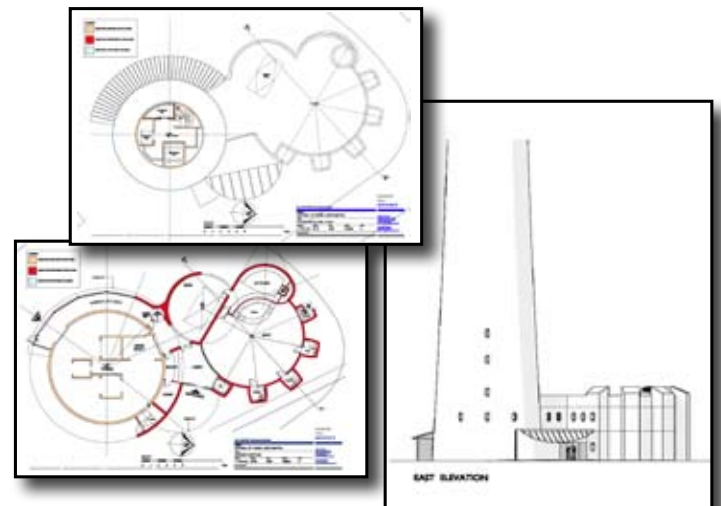
The list of work completed during phase two is extensive, including upgrading or installing all of the utilities and amenities, adding car parking and lorry access and installing access control all round the building for security and privacy.



Additionally, we now have four out of the six lifts in the building up and running. One of the largest parts of the project was the renovation of the outside of the building. A team of specialist contractors have spent several months carrying out repairs to the concrete and jet washing the entire building to remove 30 years of grime. This work was completed in early July and ensures the longevity of the tower.

Additionally, the tower is able to offer good office space, which at the time of our visit was in the process of being modernised; this will be the heart of the training and where monitoring of any units that manufacturers may be testing will take place. Looking around the tower was fascinating for two main reasons; firstly, everyone has been aware of the history of the tower and it has been rewarding for many of our colleagues to see the tower being brought back to life and making the most of its potential. Secondly, the tower can offer significantly more capacity for development, especially for the students at Northampton University, enabling students to get hands on experience and really understand technical aspects of lift technology in a practical setting.

What became very apparent as a result of the visit, is that the National Lift Tower will be an excellent facility for contractors, suppliers and manufacturers for research and development, testing and exhibiting. As a result of close ties with the university, this is an excellent facility and makes an enormous contribution to the industry and its future.



The third phase of the tower refurbishment is to extend the appeal and use of the tower site and has a number of exciting developments in it. We will be erecting a new building adjacent to the tower which will act as a reception, public café and conference centre with a 100 seat auditorium. The building will be themed towards the lift industry and will incorporate spaces for displaying new and old lift equipment. The new building will have a 150 foot long circular screen which will be used to display the view from the top of the tower to diners in the café.

As well as providing facilities for the lift industry, the tower is being made available to other industries requiring tall vertical spaces such as personal safety equipment manufacturers and working at height training companies. We are also planning to add a freefall experience from the roof which will see members of the public landing on the roof of the new building having descended over 400 feet in under 9 seconds.

CASE STUDY

**BY BRENDAN JOHNSON BSC (HONS)
LESTER CONTROL SYSTEMS**

Lester Control Systems were looking for a facility to test their already successful 'Direct to Floor (DTF)' system at higher speeds. It was brought to our attention that the 'Old Express Tower', now the 'National Lift Tower' was being renovated. After getting in touch, we were warmly welcomed and were given a tour of the tower and its facilities. We were looking for a lift shaft that would take us up to a speed of around 8m/s. However the fastest available at the time for hire was the Medium Speed Shaft, which was fitted with a Gearless machine, which would run at 2.5m/s.

We decided to refurbish the lift and increase the speed to 4m/s. Although the speed was not 8m/s it would test our system to the fastest yet.

Our refurbishment consisted of:

- A new Ziehl Abegg SM250.60B Gearless Machine
- Re-Rope supplied and fitted by Pfeifer Drako.
- A new Almega Control System with Broadband Internet connectivity and ECO friendly Direct to floor approach.
- VVF Drive supplied by Magnetek
- VVF Regenerative Controller supplied by Revcon
- An Ultrasonic positioning system 'USP' supplied by Schmersal
- A Lester Controls Serial Communication Push / IO system
- Lift car push plate including push buttons, indicator and a TFT LCD indicator.
- Car top operating control station

We initially hired the shaft for a period of 6 months to complete our work before the Liftex 2010 exhibition. We achieved that and were very pleased with the results, the ride quality at the desired speed, and the overall installation. Following that we held 2 open days during the summer of 2010 for our customers.

Lester Controls intend to hire the tower for future projects and for further open days.

All in all it's been a great success, working with National Lift Tower and being able to test and promote our products. The test facility is unique to the UK and very convenient for ourselves.

EVENTS AT THE TOWER

INAUGURAL NLT ASSOCIATION WORKSHOP.

1:00pm – 5:30pm, Thursday 25th November 2010.
We are pleased to announce the first workshop following the formation of the National Lift Tower Association. As well as the presentations, practical demonstrations and roundtable discussions, there will be an opportunity to take a tour of the newly refurbished tower. We hope you are able to attend.

DR. GINA BARNEY (GINA BARNEY ASSOCIATES)

Presentation and discussion on the energy efficiency of lifts, escalators and moving walkways including an insight into BREEAM.

RICHARD TAYLOR (NLT ASSOCIATION)

Demonstration of drive regeneration technology on the high speed and engineer's lifts.

MALCOLM MILES (LIFTCERT LTD)

Presentation and discussion on updates to the EN81 range of standards and the impact to the industry.

RUSSELL WALKER (ATWELL INTERNATIONAL LIMITED)

Demonstration of safety equipment to prevent upward/downward falling and uncontrolled movement of a lift car.



NLT ASSOCIATION ANNUAL SUBSCRIPTIONS 2010-2011

ASSOCIATE MEMBERSHIP

Subscription is £240 + VAT per year for each associate. This entitles the associate member free attendance at one of the NLT Association workshop events at the tower each year.

SPONSOR MEMBERSHIP

Rates for sponsor membership vary depending on the scope of the relationship between individual companies and the National Lift Tower. Please contact us to discuss.



RESOURCES

The tower has a number of key resources which are available for rent;

HIGH SPEED SHAFT

At over 100 metres tall and with a theoretical maximum speed of 10m/s, this offers a unique facility in the UK.

MEDIUM SPEED SHAFT

Currently running at just over 4.0m/s and with a travel of 30m, this is an important facility to manufacturers wishing to develop, test and market their equipment

TRAINING SHAFT 2

The motor room for this lift has been laid out with the specific purpose of giving excellent teaching access to all the equipment

DROP TEST SHAFT

This extensive facility offers testing and type testing opportunities for safety components. The shaft is 27m tall with a ten tonne hoist and an electric cradle for installation and inspection of the components being tested.

TRAINING SHAFT 1 & THE HYDRAULIC LIFT SHAFT

Currently out of service, these shafts offer travel of 7.3m and approximately 19m respectively.

77M TEST VOID

The void is suitable for running experiments on lift equipment such as ropes where height and all-round access is important.

National Lift Tower
Northampton
NN5 5FH England
t 01604 587745
e enquiries@nationallifttower.co.uk

www.nationallifttower.co.uk

