May 2004 Issue 73



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WHAT'S GOING UP or DOWN THIS MONTH: <u>NEW INDUSTRY APPOINTMENTS</u>:

A swathe of movement in the industry over the past few months has seen familiar faces re-emerge, some move along, and even a new Aussie face to raise the local industry standard!

SCHINDLER: Jeff Schmelz with good industry and management experience and great client communication abilities has been caught up in a ChCh reshuffle, becoming free in the NZ market with LEC showing some interest. *Robert Hallsmith* (ex Otis Wellington Sales) has been appointed the new Schindler Wellington Sales Mgr. KONE: Mike Boyd previously looking after all those Otis ChCh installation contracts including the Gen2 MRL, has moved over to learn all about the KONE Monospace MRL with his appointment as KONE Contracts Mgr in ChCh.

OTIS: Debi Wilson brings all the right qualities to the ChCh office as their new Sales Administrator. At last another Aussie in the NZ market.

I understand Auckland and Wellington have also added new sales Administrators to their structure.

EDITORIAL. BIA becomes BIB:

It is a hard subject to get away from at the present as the Building Bill comes closer to fruition.

The Building Act was introduced in 1991 broken into some **93 sections** spread over 71 pages, with some 46 or so pages of schedules.

A few leaks and many trees later, the Building Act 2003 is likely to replace it on July 1st 2004 with some **386** sections spread over some 168 pages, with 31 pages of schedules. Just under double the size.

This is the Government Ministers solution to a few leaky buildings. For well over a year now they have held court over the industry pleading for building industry opinion, holding seminars and meetings up and down the country while multiple Ministry appointee has taken notes and withdrawn to write up their solution to the issue, and this is the result.

For the skilled trades, they are going to accredit everyone who cannot prove he isn't a cowboy. For the Building Certifier's, they know the structure too well, so accreditation and crippling insurance for them. For the professions, well they have enough lobbyists to retain the status quo, and the Territorial Authorities, hopefully will focus more on efficiently administering and enforcing the building consent and compliance schedule process, rather than imitate building inspectors of old.

The BIA, well have they become the Ministries BUILDING INDUSTRY BUREAUCRACY ?. Ed.

LEC MAKES APPLICATION TO THE NZLEA:

As detailed in the last newsletter, the NZLEA has set up a closed user group site that non-voting Associate members will be able to access to provide opinions etc. I see this as a functional service for communication between members to discuss industry issues, and so encourage all associated in any way with D2 equipment to also consider joining. Fees are \$200pa for Associate membership and further details can be found on the NZLEA site at www.lifts.org.nz.

CAR PARKING SOLUTIONS:

New Zealand now has its own local company that will focus on providing your car parking solutions. Bob Haswell has set up as Car Parking Solutions providing for the 2 car apartment dweller through to the multi-storey car parking building. Since the launch he already has over 30 projects underway demonstrating the demand for these solutions. Ph: 03 540 2755 - Fax: 03 540 2757 Mobile 027 4350 580 - email: <u>carparkingsolutions@xtra.co.nz</u>. Website: <u>www.carparkingsolutions.com.au</u>.

LOOKING AHEAD:

Lift 2004 Milano 17th - 20th November 2004 - in Milan. see - www.fmi.it/lift/

Elevcon Asia 2005 22-24 June 2005. Hotel Bejing. **Call for papers** for the 4th Elevcon Asia Congress on vertical transportation Technologies and 15th World Elevcon Congress. Ami Lustig - Programme Manager Email: <u>els@netvision.net.il</u> for details.

Interlift 2005:

Interlift 2005 has been scheduled for October 18-21, 2005. The last Interlift was the most successful in the show's history with 433 companies from 39 countries represented and 16,814 visitors. Exhibitors from that show assessed overall participation results at 80%. Additionally, 44% of the visitors and 60% of the exhibitors came from outside of Germany. Organisers AFAG Messen und Ausstellungen GmbH and the German Association for Elevator Technology, the VFA Interlift, will be promoting the 2005 show at various trade industry events beginning with the China Expo which is currently underway. For information on Interlift 2005, contact Winfried Forster, AFAG Manager Press Department, Messezentrum, D-86159 Augsburg, Germany. website: www.interlift.de. phone: (49) 0-1805-860700345, fax: (49) 0-1805-860700349. e-mail: presse.interlift@afag.de

WORLD NEWS FROM ELENET ® OTIS REVENUES UP 16%:

United Technologies Corp. (UTC) 2003 financial statements report that Otis increased revenue by 16% with positive showings in Asia and Europe. The operating profits increased by US\$320 million, up 30%. The Gen2[™] elevator and NextStep[™] escalator came out in 2003 and have been installed in places such as the7 World Trade center, the Grand View Mall in China, the Elsburg Plaza in the Ukraine and the Kremlin Palace in Russia. Otis also acquired Amtech Elevator Services. Overall, Otis' revenues were US\$7.9b, operating profit was US\$1.38b and the operating profit margin was up by 17.4%.

FORMULA SYSTEMS APPOINTS CIRRUS AS NZ

AGENT: Formula Systems has announced the appointment of Cirrus International Ltd. to represent it in New Zealand for its range of elevator safety edges and the Orator annunciator. Cirrus International is based in Christchurch, New Zealand. **Ed's Note:** Laurie Hogg (Formely T.L. Jones Ltd, ChCh) heads Cirrus International Ltd. Laurie supplies a range of lift accessories including LCD displays and indicators. Email: <u>cirrusint@xtra.co.nz</u>

THE SPACE ELEVATOR:

The **Space Elevator** (SE) was highlighted at the 2002 Space and Robotics Conferences held March 17-21, 2002 in Albuquerque, New Mexico. Brad Edwards, pioneer of the SE, addressed the conference and discussed the ongoing competition to commercially produce nanotubes, a major factor in the development of the SE.

The 3rd Annual International Space Elevator Conference is to be held June 28-30 at the Leows L'enfant Plaza Hotel in Washington, DC. The sponsors include the Institute for Scientific research, Inc. Los Alamos National Laboratory, NASA, Institute for Advanced Concepts, NASA Marshall Flight Center and the



National Space Society. For more details, contact The Space Elevator at (304) 368 9300, Fax: (304) 368 9313, email: <u>The-Space-Elevator@isr.us</u>. Web: <u>www.isr.us</u>. see article

CTBUH CONFIRMS TAIPEI 101 AS WORLD'S TALLEST:

After it reviewed its criteria, the Council on Tall Buildings and Urban Habitat (CTBUH) Height Committee officially designated Taiwan's Taipei 101 as the "World's Tallest." The announcement was made by CTBUH

Chairman Ron Klemencic at the Structural Engineers Foundation of Illinois' 2004 Lecture on April 15 in

Chicago. Members of the Taipei 101 design team made a presentation on the construction of the building at the lecture.



SCHINDLER MRL FEATURES ENHANCED: The

Schindler 400A(TM) machine-room-less (MRL) traction elevator system has been expanded to offer more options, including a glass cab option for applications where aesthetics or security are important to the design. According to Schindler, the expanded 400A system offers an MRL for a wide range of mid-rise buildings.

KONE AND TOSHIBA ANNOUNCE NEW COLLABORATION:

KONE Corp. and Toshiba Elevator and Building Systems Corporation have agreed to strengthen their alliance through long-term collaboration in the advancement of high-rise elevator technology. As a first step, KONE and Toshiba have agreed to a licensing arrangement enabling KONE to supply high-speed double-deck elevators based on Toshiba's proven technology and Toshiba to gain access to new markets outside Asia. The partners have also agreed to exploit, on a case-by-case basis, the potential for collaboration in competing for and carrying out mega-projects around the globe.

THE SPACE ELEVATOR:

What: An "elevator" that carries heavy loads into space Where: equatorial pacific ocean. Cost: \$10 billion.

Crux: A 62,000-mile cable -- one end "anchored" in space and the other attached to a platform in the Pacific that acts as a rail for laser-powered lifters carrying up to 5 tons.

Thirty-four years after the first human step on the Moon, cheap and reliable access to orbital space remains a seemingly distant dream. When it's flying, the shuttle costs \$500 million per trip; lofting unmanned payloads still costs at least \$12,000 a pound. Science fiction writers have long touted an elevator into the heavens, but pesky physics has always gotten in the way; there's simply no material that's light and strong enough to stretch to orbital heights without collapsing under its own weight. Physicist Brad Edwards was researching at the Los Alamos National Laboratory in the late '90s when he overheard a colleague say that such an elevator couldn't be built for 300 years. Edwards, though, was familiar with carbon nanotubes -- nanoscale carbon structures 60 times stronger than steel. He did some calculations and hasn't yet found a reason why a space elevator can't be

built. Last year Edwards became director of research at the Institute for Scientific Research in Fairmont, West Virginia, and received \$500,000 from NASA's Institute for Advanced Concepts to flesh out a plan.



Edwards's design: Rockets blast off to 22,000 miles, launching an "anchor" satellite that uncoils a ribbon made from carbon- nanotube composite fiber as it ascends to 62,000 miles. The ribbon flutters to the ground, where technicians attach it to a platform floating at the equator. The centripetal forces at the space end keep the ribbon taut and maintain it in a geosynchronous orbit. Electric elevators powered by ground-based lasers and carrying as much as 5 tons in payload would climb up and down.

May 2004 Issue 73

The biggest challenge: The longest nanotube ever created is just microns in length. But by combining nanotubes with an epoxy resin and then extruding the mixture like monofilament fishing line, "you can already make strands as long as you want," Edwards asserts. Two other great obstacles remain: maintaining the elevator despite hurricanes, meteorites and corrosive atomic oxygen, and building the laser system. "It's a big engineering challenge," Edwards says. "There will be difficulties. But there's absolutely no physics reason why it can't be done."

Most of a rocket's fuel is spent blasting through Earth's thick atmosphere and out of the planet?s strong gravitational field. But here's an alternate strategy for getting payloads up to space: Construct a 62,000-mile-long cable jutting straight out from the equator, hold it in place with centripetal force, then lift satellites and spacecraft out of the atmosphere with a giant freight



elevator.

One major hang-up: Cable strong enough to support the system does not yet exist, though it could be made from **carbon nanotubes.**



The Space Anchor Launched to a geosynchronous orbit, the 45-ton anchor deploys its carbon-fiber-filament payload to Earth's surface. Engineers attach the filament to a **base station** floating west of the Galapagos Islands. The anchor keeps itself in place using fuel stored in its 8-footdiameter propellant tanks.

The Climber Once the filament is in place, it must be

strengthened. More than 200 "climbers" will add layers of carbon-nanotube fiber to the tether, until it widens into a 3-foot-diameter cable. An infrared laser fired from Earth will beam energy to the climbers.

The ISS By comparison, the International Space Station orbits a measly 250 miles above Earth's surface.



LOCAL LIFT ACCIDENT:

An employee of a Christchurch produce market was severely injured when riding alone in a non-passenger drum-drive freight lift to access a below ground level cool-store in April. All safety functions were operational on the unit and it may have been the operation of the slack rope device or the upper door being pushed open that saved the persons' head from being crushed. OSH inspected the site and Building Compliance Schedule issues are being addressed in conjunction with the

property owner. The injuries were sustained when the users' head became entrapped between the low headroom freight lift and the upper floor sill as the lift travelled down. Some modifications are being made to ensure entrapment cannot happen in this way again, but



this accident demonstrates the need for building owner to be aware of employee operation of such equipment, and to ensure they are fully aware of the limitations in its use and inherent dangers. Thankfully in this instance the injuries should heal, with the long-term effect at this early stage unknown. The lesson to us all in this industry as I see it, is to keep good communication with your building owner, to enable your experience of what may seem obvious to you, to be fully appreciated by them.

PRODUCT NEWS

First it was high-rise housing now it's car stacking!

UST AS the Government is telling us we should all start getting used to higher-density, apartment-style living, an Australian company is encouraging New Zealanders to start stacking cars on top of one another!

Car Parking Solutions NZ Ltd is taking on the challenge of changing the way we think about parking, how we design for better parking and how we maximise the parking space we have.

Its Melbourne-based parent company is bringing German technology to New Zealand in the form of the Wohr car stacking systems.

Car Parking Solutions NZ Ltd says in most main New Zealand centres there is a shortage of space for adequate parking places at hotels, apartment buildings, shopping centres, car yards, office buildings, public car parking buildings and airports.

Car stacking systems are even being installed in residential properties in Australia.

Wohr is a specialist company that manufactures only car stacking systems. The company was founded in 1902, and has created more than 250,000 park spaces world-wide.

The systems can cater for two cars or for up to as many car spaces needed. Simple and cost-effective hydraulic systems move cars in park lifts/parking platforms, and the ultimate "Multiparker System" moves cars up and down and side by side to maximise the space available.

Car Parking Solutions NZ Ltd says the real challenge is getting to the grass roots level of the design and construction stage of new buildings in New Zealand.

For example, a new apartment tower can be simply changed to provide double the parking that is traditionally allowed. In the main centres of New Zealand the cost of a single car park averages \$28,000.A stacker can provide two spaces.

Advantages are:

Better utilisation of land area,

 Doubling the car parking space available,

 Cost effective. Car stacking systems start at around NZ\$18,000 for two car parks or \$9000 each. Imagine an apartment building where the average price of an apartment is \$500,000 but can provide for two car parks for \$9000 each,

 Car stackers are safe and secure, and meet the highest technical and engineering standards,

 Car stackers can not only provide additional car parking space but storage space also.

Car Parking Solutions NZ Ltd was

formed last year by Bob Haswell. It has exclusive rights in New Zealand for Wohr car stacking systems.

While travelling overseas, Mr

Haswell noticed the systems being

This company is taking on the challenge of changing the way we think about parking, how we design for better parking and how we maximise the parking space we have. used throughout Europe and Asia, and considered that New Zealand was ready for what have become standard parking methods internationally.

The company is based in Nelson and services the whole of New Zealand.

Mr Haswell's ultimate car parking dream is "to see a glass tower in central Auckland providing for 200 cars and using just 150 sq m of land area".

