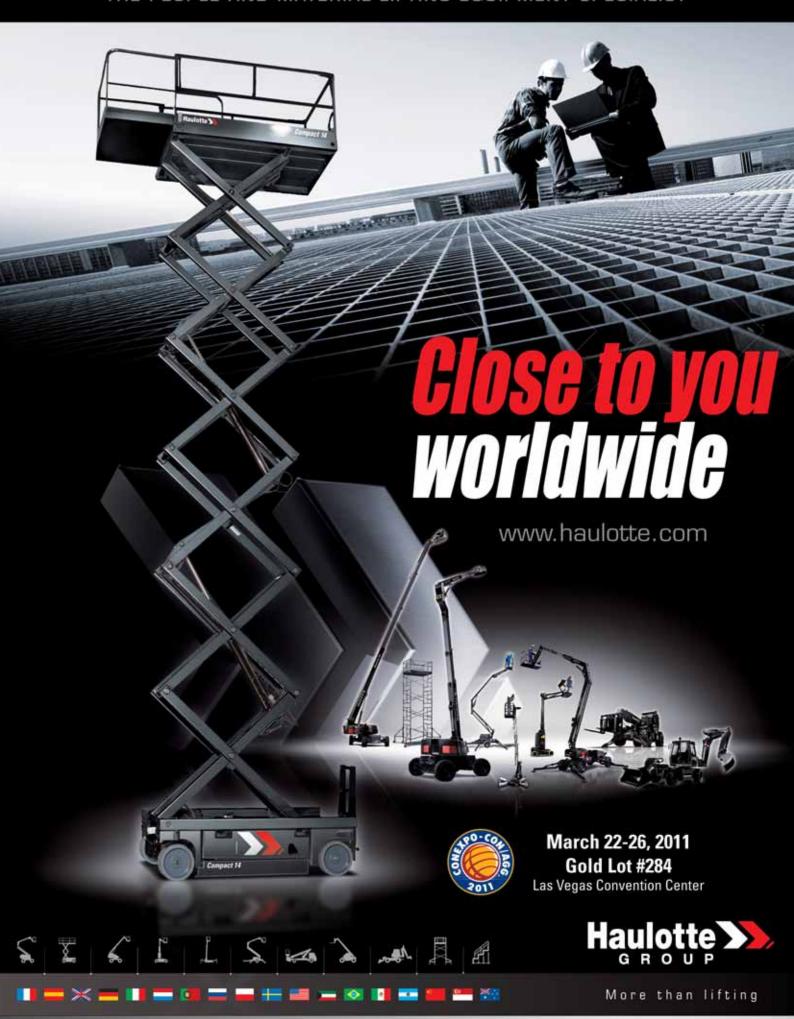
#### THE PEOPLE AND MATERIAL LIFTING EQUIPMENT SPECIALIST



# Small booms Save costs

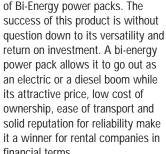
JLG has been very busy recently. Not only is it the first of the access majors to dip its toe into the spider lift market - albeit with a badged Hinowa - but it has also launched the largest self-propelled telescopic boom to date - the 150ft 1500SJ - and at the other end of the size scale its smallest non-industrial articulated boom so far, the 340AJ.

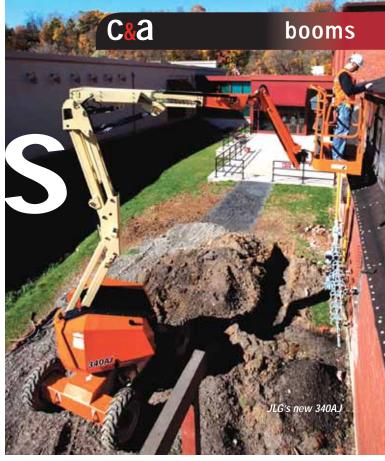
For JLG, the 34ft 340AJ takes the company into a new market, or it can be argued it even creates a new sub-sector. 12 metre working height articulated booms are not new of course. In addition to a slew of industrial type products from the major manufacturers, there are some significant players in the lighter general purpose market particularly in Europe where Niftylift and Snorkel (UpRight) have sold large numbers of their low overall weight, relatively narrow products for many years.

Nifty is the leader here with its HR12 which is available in narrow, wider and 4x4 versions with diesel of Bi-Energy power packs. The success of this product is without return on investment. A bi-energy power pack allows it to go out as an electric or a diesel boom while its attractive price, low cost of ownership, ease of transport and solid reputation for reliability make it a winner for rental companies in financial terms.

#### The ATN dimension

Recent entrant to the market was ATN – a neighbour of JLG's Toucan plant in Tonneins, France - adding a new dimension to the market with the 2009 launch of its Zebra 12R, a high ground clearance product with





articulated jib and an amazing eight metres of outreach. The downside though is that it weighs more than five tonnes and thus comes close in weight to the industrial-type boom lifts such as Genie's 30/22 - 34/22 ranges and JLG's own E300.

Airo with its A12E and 12ED. However they have yet to gain a following on the international stage.

The fact is that the mainstream market in North America tends to go for 40ft straight booms or 45ft articulated booms, only going



Both Nifty and UpRight - now Snorkel – have been surprised over the years that in spite of the growing popularity of a compact, lightweight, 12 metre self-propelled boom, none of the big high-volume boom producers chose to adopt the concept and introduce a direct competitor. That is not to say there is no competition. Spanish-based manufacturer Matilsa produces a very good product that spec for spec goes head to head with the Snorkel, as does Italian producer

smaller for the narrow industrial booms and then largely for niche applications. Genie has a 34ft 4x4 boom as does Haulotte but their designs reflect their industrial ancestry and are well over five tonnes. The odd thing is that one of the first articulated boom products on the market back in the early 1980's was a 30ft Genie, which sold well but was overtaken by the company's 45/22 (which morphed into the 45/25) particularly after an RT version was added in the late



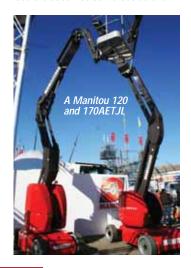
#### booms

1980's. The problem with products that are essentially smaller versions of 45ft booms is that they use the same number of hydraulic cylinders, motors, wheels and other components which can mean that the production cost differential is not great enough to persuade rental buyers to switch or for the manufacturer to make a decent margin. However with rising fuel costs there can be operational savings that now make the concept an attractive proposition.

#### Cutting the costs

When JLG looked at this market it says that its main design goals were to reduce rental customer operating and transportation costs, as well as filling a gap at the lower end of its AJ range (the next largest diesel boom is the 45ft, 450AJ). One of key criteria towards achieving this was its target to get three machines on the back of a standard flatbed or into a 40ft shipping container. This can be achieved with the 340AJ by raising the boom slightly and tucking the jib under. With jib stowed the normal 5.52 metre overall length is reduced to just under four metres. Given the lengths of the Niftylift HR12 and Snorkel A38E – both just over four metres - it is also possible with careful loading to ship three units within a 40ft container or truck bed. By comparison a typical 45ft boom with jib is 6.5 metres long and even two can be a struggle.

The JLG 340AJ is really a 'crosscategory' machine (along with the ATN) in that it combines most of the features of the 45ft 4x4 boom lifts – including a superstructure mounted engine - with dimensions that are much closer to the 12 metre Nifty-style of boom lift. As a result it does not come out as the





34ft class leader on many specification points, but does do well overall. It can boast the best up and over height of any unit under fiver tonnes, thanks to its dual riser compared to single risers on the rest, has the best gradeability, one of the best working envelope's thanks to its articulated jib and it is the shortest when stowed.

Overall weight at 4,400kg is almost two tonnes lighter than its 45ft cousin, but a tonne heavier than the 4x4 Niftylift HR12. JLG currently only has plans to launch a single model while Nifty is able to offer all manner of power options as well as a narrower chassis. JLG though is going for the general construction market in North America and as such this machine will be seen as a real alternative to 45ft booms, while many US rental companies still 'don't get' the Nifty concept. The big question is what impact will it have in Europe?

JLG does of course have a range of electric articulated booms - as does Genie. In addition to its industrial E300 it offers a narrow and not so narrow 40ft version of its E450 but they weigh almost six tonnes.

#### **Snorkelfied version**

If JLG manages to shift the 12 metre focus away from the electric/bi-energy 1.5 metre wide models, which was Nifty's starting point, to real Rough Terrain booms. Snorkel may be the one that will find itself struggling the most to





compete. It's A38E - a Snorkelfied version of the UpRight AB38 - while highly popular for its light weight, compact dimensions,

manoeuvrability and good return on investment, is not by any measure a Rough Terrain boom, in spite of its strong gradeability. ATN might gain from any additional interest in the 12 metre working height Rough Terrain booms and it is worth pointing out that ATN is owned by Daniel Duclos of French rental company Access Industrie who has a strong nose for new trends and what the rental company customer really wants. Perhaps his ATN Zebra was just ahead of its time?

#### Cleaner power

Additional features and demands that are now creeping into the market include cleaner emissions. Niftylift has led the way here with its Hybrid technology. Although not yet available on the HR12, if there is demand and it can be done, you can be sure that Nifty will do it. The JLG 340AJ uses a tier 4 Kubota diesel which is cleaner and more efficient than most and will provide significant fuel economy over its







	ATN Zebra 12	JLG 340AJ	Niftylift HR12	Snorkel A38E	Genie Z34/22	Manitou 120AETJL	Haulotte HA120PX
Working height	12.2m	12.31m	12.2m	13.5	12.52m	11.95m	12.4m
Platform height	10.2m	10.31m	10.2m	11.5m	10.52m	9.95m	10.4m
Outreach to platform edge	8 m	6.06m	5.6m	5.6m	6.78m	6.27m	6.1m
Up and over height	4.42m	5.18m	4.2m	5.0m	4.57m	4.77m	5.7m
Slew degrees	356	355	360	365	355	355	350
Width	1.94m	1.93m	1.6m	1.5m	1.47m	1.5m	1.9m
Stow Height	2.11m	2.0m	1.95m	2.0m	2.0m	1.99m	2.2m
Length	4.5/6.05	3.98/5.52	4.1	4.04	4.19/5.72	3.93/5.52	5,7m
Weight	5,150 kg	4,400kg	3,330kg	3,850kg	5,171kg	5,050kg	5,620kg
Max speed mph	3.7	3.1		2.5	4.0	3.1	3.1
Turning radius O/S	4.1m	3.96m	3.4m	2.4m	4.1m	3.96m	3.85m
Capacity	230kg	227kg	200kg	215kg	227kg	200kg	230kg
Platform size	1.45 x 0.8	1.22 x 0.76	1.1 x 0.65	1.2 x 0.6	1.42 x 0.76	1.2 x 0.96	1.5x0.8
Gradeability	45%	45%	30%	36%	35%	31%	45%
Drive	4x4	4x4	4x4	4x2	4x4	4x2	4x4
Jib	Yes	Yes	No	No	Yes	Yes	Yes

existing 45ft booms - something contractors are increasingly looking for.

Another neat feature on the new JLG which could be a significant cost saver for rental companies is an LED fuel gauge which shuts the engine down when the tank reaches around six litres - just over 10 percent of capacity - and allows the operator one more re-start to refuel before shutting the machine. This should help prevent users getting stuck when the machine runs out of fuel and the need to bleed the fuel system after filling up from empty. However, if machine handovers are not conducted properly and users ignore or are unaware of the warning cut-out, this could prove to be an irritant - although no worse than running out of fuel if you were to carry on working.



#### All down to price?

Success in the 12 metre 'lightweight' boom sector, at least until now, has required low overall weight, compact dimensions, easy to use controls, quick functions and most importantly of all first class reliability at a price that offers clear value.

JLG may suffer in some markets such as the UK, from the lack of a bi-energy power pack option, but





will gain in others from the performance features it adopts from 45ft booms. With rental rates on 45 foot articulated booms at less than commercial levels, combined with the fact that many users do not really require anything more than 12 metres working height, it could prove to be a winner but much will depend on where the company pitches the price.

The chart on page 18 shows how the machines that we have been discussing compare along with the 34ft offerings from Genie and Manitou.

#### The dustbins

When looking at 10 or 12 metre working height boom lifts you can't ignore the narrow and ultra narrow industrial boom lifts, sometimes referred to as 'wheeled dustbins' thanks to their almost round, high superstructure designs – necessary for the ultra narrow overall widths of the smallest units. Dimensionally the most compact of them are only marginally wider than a mast boom, but thanks to their telescopic booms and articulating jib they offer significantly more outreach of course - up to 6.5 metres in some cases. Most of them now offer 180 degrees of jib rotation in addition to 140 degrees of articulation. The downside of these units is of course their weight - coming in between six and seven tonnes - and ground clearance.

Genie has the widest range in this category with 30ft and 34ft models with electric and Bi-energy versions. Although the wider 34 models have evolved into products that are closer to the new JLG with lower wider superstructures and more ground clearance. Other participants include JLG with its E300N - which it revamped and improved substantially in 2010, although it looks the same and carries the same model nomenclature as its predecessor.

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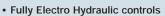
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#### booms

Manitou produces a very good model in this category, the 120AETJ Compact which is just 1.2 metres wide but boasts 6.5 metres of outreach and 180 degree rotating jib. Italian based Iteco is the latest company to enter this market which remains very much a niche sector, with its IT100E shown at last year's Bauma in April.

#### The future?

The challenge for most rental companies is to source machines that cater to customers specialist needs but are also versatile enough to cover as wide a range of applications and customer types as possible and of course be economical to run. The Niftylift does this well with its wide power and chassis choices. Haulotte, Genie and JLG have covered the different applications with a wide range of different models within the same range. How the market develops from here is anyone's guess, but one thing is for sure, manufacturers will come under increasing pressure to introduce new models that are less costly to run and that can make a return on poor rates.

# Tower Bridge booms

Four Niftylift HR12 articulated boom lifts hired by Pyeroy's Special Projects division from AFI-Uplift, have been working on one of the world's most iconic bridges - Tower Bridge in London. The booms were used to apply a protective paint to the bridge as part of the fourth and final stage of a three-year maintenance contract. A classic application for these units.

Painting underneath the arches of the North and South towers could only be done while the road was closed, so Pyeroy had to work overnight and then move the equipment out of the way during day. AFI specified the HR12s for the work because compact dimensions were important as when the machines were not in use they were parked up on the bridge's pedestrian footpath which had weight and width restrictions. "We used the boom lifts to remove old paint and apply



Services director Brendan Fitzsimons. "They gave our contractors the reach necessary to work safely and efficiently on the arches of the bridge."

Tower Bridge was built in 1894 and took eight years to complete. It involved five major contractors, 432 construction workers and more than 11,000 tons of steel to provide the framework for the towers and walkways.

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**A** matter of size?

Mike Potts is a new name at Lavendon Access Services, by far and away the UK's largest powered access company. Its new UK chief executive is also new to the access industry. Just four weeks into his new role, Mark Darwin travelled to Lutterworth for a chat.

Living in central London and travelling to and from Lavendon's head office in Lutterworth by train, Potts has a lot of time for reading.

"I would rather travel by train than drive and use the time to catch up on reading the Financial Times, Economist and lately a magazine called Cranes & Access," he says smiling. "Although I have worked in five different business sectors and have a good balanced industry background, I have never been involved in the access rental industry so need to quickly get up to speed."

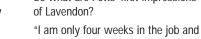
Many companies prefer a mix of senior personnel including some from outside the industry believing that it gives them a more balanced perspective and business approach. But that is not to say he doesn't know anything about the sector.

Trained as a mechanical engineer he worked for Shell on an oil refinery for five years and was involved in specifying and hiring equipment including scaffolding. That job also introduced and indoctrinated him into a strong safety culture which is obviously a major benefit in his present position. After Shell he



went to the INSEAD graduate business school in Paris, not only gaining an MBA but meeting his French wife to be. His Parisian studies led to senior management positions more in the sales, marketing and commercial roles over the next 15 years in the paint industry, at Amtico flooring where he was involved in a Management Buy Out and most recently at international vending operator Vendia.

Potts takes over from Andy Wright whose involvement in the Middle East business development project grew so rapidly that he is now permanently based in Dubai.



although I have managed to travel around many of the depots, I am still getting used to the company, industry and the equipment," he says. "I have however already got my PAL card, having taken and passed the IPAF Mobile Vertical 3a and Mobile Boom 3b training course - done in-house - which was good fun and which I thoroughly enjoyed."

#### "A good 'one company' feel"

"Given the company's acquisitive history - particularly in recent years - I was pleasantly surprised at how 'together' it is. My predecessors have done a great job of integrating the different companies and there is a good, 'one company' feel to the whole business. I am particularly excited that there still appears to be a lot of development left in the powered access industry and it is quite a dynamic sector. Perhaps a fresh pair of eyes will be an advantage in developing new ideas?"

He says that a previous role working in the flooring business - differentiation.

"Too many businesses offer a 'me-too' product and compete purely on price whereas the company I was working for was a master at differentiating on aesthetics, design and quality of the product - which allowed us to preserve the business longer and achieve better prices and results."

As UK chief executive, Potts also sits on Lavendon's Group Executive Committee and is involved in a contributing way to businesses outside of the UK. His fluent French and Spanish may also be a benefit here although he admits his German is not as good as it might be.

For the man in the street, Lavendon's company branding can at times appear confusing. But is this something that he aims to clarify?

"About 18 months ago the UK businesses were consolidated into Lavendon Access Services operating through three brands - Nationwide Platforms, Panther and EPL Skylift due to the strong local customer affinity to each brand."

Nationwide Platforms and Panther brands are now integrated into a single depot network with some depots supplying both.





#### face to face

These are headed by Peter Douglas on operations with Richard Miller controlling sales and marketing. Rob McMeeking – previously finance director of Lavendon Access Services now heads up EPL–Skylift.

#### Triple brand super depots

"Later this year we will open a new depot in Bristol that



combines three different existing depots - one for each brand. It will be the first to represent Lavendon Access Services (although the name Lavendon will not be displayed). Whatever the name, the company will be run on the same local/regional basis and not a fully centralised structure."

Discussion on specific equipment was short as Potts had not yet had the opportunity get to know the various models and types well enough to comment.

#### "Break downs are still caused by manufacturing/ quality problems"

"Our main focus going forward is reliability and safety. Reliability has to be as good as possible and is one area that could be improved. Too many break downs are still caused by manufacturing/quality problems (switches etc). Equipment also suffers serious use on site so it's important our engineers have the appropriate skills to spot and correct problems before a machine goes out on hire again. However as utilisation increases the time window to get repairs and checks



done reduces. We need to aim not to reduce availability but have the kit in top condition 100 percent of the time."

"I am amazed how low the rental rates are relative to the cost of the equipment but such low rates cannot continue over the long term. The industry moves as it wants, but we are trying to get sensible rates for our equipment. Low rates are not fair to our employees or shareholders as we are trying to build a long-term, sustainable business. Current rates are just too low for that. The challenge is to explain to clients that the downward spiral of rates is not the way to go and that it will eventually lead to poor service and less reliable equipment."

"We are also working hard to

improve the safety both of our own staff and those that use the equipment. Late last year Lavendon Group CEO, Kevin Appleton, hosted a Working at Height seminar which highlighted the true cost of accidents and fatalities and the financial benefit of using the proper equipment and doing the job safely. We now offer a range of manual handling attachments for the platforms so that operators are not carrying materials on handrails making site activities much safer."

### A strong start to the year...but?

"January has started well and is looking good possibly because December weather was so bad and had a big impact on the month, which together with the timing of Christmas meant a lot of work was pushed into January. I also think that some contractors are working

flat out now to get ahead should the weather in February turn bad. We are all still cautious but are hopeful for growth this year, although the effect of the government spending cuts are still not fully realised and will only be seen in the second half of the year. Rising commodity prices such as steel etc are also likely to have a big impact on construction."

### Ashtead/TVH acquisition?

Any business can be the subject of a takeover – in my business life it is something you live with all the time and not something to fear. The most important thing was the reaction of the

Lavendon Group shareholders who dismissed the offers very quickly. This sends a message to the employees that they have a perception of the value of the company which is way ahead of what was offered. Shareholders see there is value in the current strategy and all you can do is stick with it. We believe we are doing the right thing.

As to whether Lavendon would acquire you can never say never. But we need a period of stability now in order to concentrate on our priority areas of reliability and safety to allow us to build rates and profitability – our number one strategic objective.

#### **Personal File**

Played for Watford FC juniors during the Elton John/Graham Taylor era of the late 70s and early 80's in the six years when Watford FC went from the bottom of the old Fourth to the First (now Premier) division. As goal keeper, he won an FA Youth Cup winners medal in 1982 beating Manchester United in the final. Went on to captain his University team but preferred to follow a career in industry and business rather than pursue football as a career.

Now enjoys watching sport but would much rather participate – but with a teenage family is limited to jogging, swimming, skiing and playing squash. Would rather take the train than drive, but when in the car uses the time for thinking rather than listening to music.





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