

# Inventique®

The newsletter of Wessex Round Table of Inventors

July 2005

**Wednesday 13 July WRTI ANNUAL GENERAL MEETING 7.45pm**

Joe Silver displays one of his amazing LifeLock® devices at the *Innovation 2005* awards ceremony last month

## Joe secures first prize

INNOVENTION AWARD FOR 'OUTSTANDING' DEVICE

**W**RTI MEMBER Joe Silver won a first prize of £5,500 at *Innovation 2005* – the invention and innovation show held at Winchester's INTECH science park on 27 June – with his portable LifeLock® security device.

The pocket-sized product, which can be fitted or released in seconds, prevents unauthorised access into a room and can be used by gap year students, holiday-makers, businessmen and women travelling alone, and even children on school trips.

### History in the making

"Wherever he travelled, King Henry VIII took his personal lock, for which he held the only key, to secure his room at night," said Joe,

**LifeLock®**  
**INSTANT ROOM SECURITY**

who is a security equipment specialist.

"Now, five centuries later, anyone can lock their door from the inside, anytime and anywhere, using my invention."

The LifeLock® – which underwent strength tests at Southampton Institute and can withstand forces well in excess of 650Kgf – incorporates a clock and a powerful torch and will be launched this autumn. Trade, retail and export enquiries are welcomed.

● **LifeLock Limited, PO Box 12**

**Alton, Hampshire GU34 4WZ**

**Tel: +44 (0)1420 549 829**

**sales@lifelock.co.uk www.lifelock.co.uk**

### WRTI ANNUAL KEYNOTE LECTURE

#### WEDNESDAY 13 JULY

Stephen Davis, director of the Southampton Enterprise Hub, will talk about 'Support for Innovation' at 6.30pm in room HC 005 of the Herbert Collins Building Southampton Institute East Park Terrace SO14 0RP (Free admission: guests welcome)

[www.wrti.org.uk/events](http://www.wrti.org.uk/events)  
Map: [www.streetmap.co.uk](http://www.streetmap.co.uk) (SO14 0RP)  
[www.southamptonhub.com](http://www.southamptonhub.com)

**WRTI AGM FOLLOWS AT 7.45PM**

### LUCA WINS INAUGURAL AWARD

SOUTHAMPTON INSTITUTE student Luca Giancardo has won the WRTI's first *David Nicholas Innovation Award* with his ground-breaking tftMouse™ device.

The tftMouse™ (it stands for 'The Face-Tracker Mouse') incorporates algorithmic software and a webcam to scan and track the computer operator's facial image, making it possible to click the computer's mouse or use its applications by blinking one's eyes and moving one's head.

Luca, a BSc(Hons) graduate in software engineering, envisages his hands-free invention being used as a videogame controller, a laptop touchpad replacement and an aid to the physically-impaired, with additional applications in the defence industry.

● [wacco@retebk.com](mailto:wacco@retebk.com)



Wessex Round Table of Inventors meet at 6.30pm on the second Wednesday of each month at Southampton Institute, East Park Terrace SO14 0RP

**INSIDE** View from the Chair • Graham Barker • Out and about • Gold Medal (Romsey) Ltd etc...

## VIEW FROM THE CHAIR

THE *INNOVENTION 2005* exhibition held at Winchester's INTECH Centre on 24 June was, as always, a great chance to view some fascinating inventions and innovations from across the region. A number of imaginative products were on offer, such as cheaper and easier dental implants, a completely new way to make contact lenses, and even a device for protecting postmen's fingers. Many of them will, I trust, go to market and on to success.

As you will have read in this month's cover story, the WRTI's own Joe Silver won first prize in the Business category with his useful LifeLock® portable room security device, while Paul Bone of the Isle of Wight RTI won first prize in the Individual category for his controllable petrol can.

The show's prizes were awarded by successful businessmen who based their judgements upon the commercial potential of the entries – so this all constitutes further evidence of the value of inventor's clubs. A whole range of ideas devised by members in the WRTI's five-year existence are now real products; the support of fellow club members, allied to the superb resources at Southampton Institute, have made a real difference to members' onward drive.

JACK KILBY, inventor of the 'monolithic integrated circuit' (aka the microchip) died last month in Dallas. He devised the concept of placing electronic circuitry onto a small piece of silicon whilst working at Texas Instruments – where more experienced engineers pooh-pooed such a seemingly simple solution. Although his idea 'provided much of the entertainment at technical meetings over the next few years', it is now the all-pervading technology.

So my message is this: don't sit at home worrying whether other people will pooh-poo something you've thought of – visit your local inventors club and make it happen.

Who knows, once it's produced we might all need one!

Sincerely,  
Richard

**RICHARD LITTLE, Acting Chairman**

**INVENTORATOR** Graham Barker

# Learning curve...

INVENTION AND EDUCATION GO HAND-IN-HAND

**I**N THE 22 YEARS I've been involved in advising about invention, the world has gone from typewriters to text messaging, yet one thing has hardly changed. The vast majority of people – and this includes first-time inventors – still don't have a clue about the process of invention.

They *think* they know – get a patent and hey presto! – but they don't. The misconceptions, mistakes, miseries and scams that were around in 1983 are still around now. Apart from a few isolated pockets of excellence, our nation's understanding of invention seems not to have improved at all.

Given the speed at which our manufacturing base is slipping away, it can only be a matter of time before China, India *et al* become the pre-eminent sources of invention and innovation, and any clout we had in those areas will just be a folk memory.

We're constantly told that our future lies in 'adding value', but adding it to what? Increasingly, product is arriving in this country already dripping with added value.

## One plus one equals... umm...

One long-overdue means of fighting back could be to teach invention skills in schools, colleges and universities – ideally as part of the National Curriculum, before too much specialisation kicks in and all the budding accountants consider an understanding of invention and innovation to be either irrelevant or beneath them.

Invention skills should at least be a routine element in further and higher education business, design and technology courses. However it's done, key lessons would be learned before the event rather than during or after it.

And it needn't take much time

or effort. The required skills are not rocket science and could easily be bolted on to existing curricula. They're essentially the skills needed to avoid mistakes: how to assess novelty and prospects, how to approach the minefield of IP and disclosure, how to choose an exploitation route, how to present inventions for funding and support, how to reduce and control risk.

I'm not suggesting that the main aim should be to produce more inventors. It would be dismaying if that didn't happen, but what matters more is that *everyone* has a working grasp of the mechanics and travails of evaluating and developing new ideas. Not just the self-selecting, but people whose expertise can make a big difference to an idea's prospects – in design, technology, marketing and PR, manufacturing, retailing, enterprise support, law, finance, academic research, the media...

Imagine a situation where an inventor approached almost any company or organisation and, instead of the typical '*It's an inventor! Quick – look busy!*' reaction, found people who already knew enough to pitch in with intelligent, positive input. It could raise the UK's innovation game no end.

A compelling case, I thought. So I sent in a proposal to the DfES Innovation Unit. With a name like that, I assumed we'd at least get a hearing. Wrong! A few days later I got a woffly e-mail that boiled down to: 'Sorry, but we're not remotely interested.'

*'It's an inventor! Quick – look busy!'* had struck again. ●

© Graham Barker 2005

● *Graham Barker is co-author with Peter Bissell of The Business of Invention, ISBN 0951-3856-31*  
[www.abettermousetrap.co.uk](http://www.abettermousetrap.co.uk)

# Sea Harrier jets land on autopilot

**LANDING ON** the pitching, rolling deck of an aircraft carrier is a challenge for any pilot, and fog can make it all but impossible. Now a system called Autoland has for the first time allowed a vertical take-off Sea Harrier jet to land without help from the pilot.

Autoland uses GPS positioning to allow the vessel and the aircraft

to find each other. Inertial data from the ship tells the plane how the deck is rolling and pitching, so it can fine tune its approach and touchdown. Project leader Jeremy Howitt at UK defence lab Qinetiq says the system worked perfectly when tested at sea last week.

Source: *New Scientist* magazine, 28 May'05  
● [www.qinetiq.com](http://www.qinetiq.com)

## HUMORESQUE from Dave Challice [dchallic@bournemouth.ac.uk](mailto:dchallic@bournemouth.ac.uk)

**Childrens' science exam answers:**

Q: What is the fibula? A: A small lie.

Q: What does 'varicose' mean? A: Nearby.

Q: How can you delay milk turning sour? A: Keep it in the cow.

Q: What are steroids? A: Things for keeping carpets still on the stairs.

Q: Name a major disease associated with cigarettes. A: Premature death.

Q: Explain one of the processes by which water can be made safe to drink.

A: Flirtation makes water safe to drink because it removes large pollutants like grit, sand, dead sheep and canoeists.

# RACE IS ON FOR LUNAR AIR PRIZE

**Want \$250,000? Just squeeze some oxygen out of moon dirt and let NASA know how you did it.**

ON 19 MAY, NASA announced the *Moon Regolith Oxygen challenge*.

The cash goes to the first team to extract at least 5kg of breathable oxygen from simulated lunar dirt, aka volcanic dust. The extractor must weigh less than 25kg and the closing date is June 2008.

"The use of resources on other worlds is a key element of the Vision for Space Exploration," says Craig Steidle, NASA's associate administrator for the exploration systems mission directorate.

"This challenge will reach out to inventors who can help us achieve the vision sooner."

The lunar soil simulant, known as JSC-1, came from a basaltic ash deposit near Flagstaff, Arizona. The

trace elements and particle sizes found in JSC-1 are similar to those in the soil at the Apollo 14 landing site. "Ideally we'd like to be using real moon rocks, but of course those are pretty scarce," says NASA's Brant Sponberg.

Extracting oxygen from the dirt, which consists mainly of oxides of silicon, iron, calcium and magnesium, would make a lunar base less reliant on oxygen deliveries from Earth.

Ideally, NASA would send an oxygen generator to the moon well ahead of astronauts, so they would have a ready, fresh supply when they arrive, says Sponberg. ●

Source: *New Scientist* magazine, 28 May  
● [http://www.nasa.gov/home/hqnews/2005/may/HQ\\_05128\\_Centennial\\_Challenge.html](http://www.nasa.gov/home/hqnews/2005/may/HQ_05128_Centennial_Challenge.html)

## Special offer

WRTI MEMBERS are reminded that RTCoopers Solicitors are offering comprehensive Shareholders Agreements to WRTI member companies for only £499 – an offer that expires on 30 September.

● RTCoopers Solicitors, 5 Telfords Yard  
6/8 The Highway, London E1W 2BS  
Tel: 020 7488 2985 Fax: 020 7488 2102  
[enquiry@rtcoopers.com](mailto:enquiry@rtcoopers.com)  
[www.rtcoopers.com](http://www.rtcoopers.com)

## NEW ATOMIC ELEMENT DISCOVERED IN THE USA

A NEW ELEMENT with an atomic number of 0 has been discovered by research scientists in the USA. The element has no protons or electrons, but does contain 1 neutron, 125 assistant neutrons, 75 vice neutrons and 111 assistant vice neutrons, giving it an atomic mass of 312.

The 312 particles are held together by forces called morons, which are in turn surrounded by vast quantities of lepton-like particles called peons. Since morons contain no electrons they remain inert, but can be detected when they impede every reaction with which they come into contact.

According to the researchers, a minute amount of the new element, called Administratium, causes one reaction to take more than four days to complete when it would normally take less than a second.

Administratium has a normal half-life of approximately three years. It does not decay but instead undergoes a reorganisation, during which some of the assistant neutron, vice neutron and assistant vice neutron particles exchange places.

Administratium's mass appears to increase over time, since with every reorganisation some of the morons inevitably become neutrons, forming new isotopes. This characteristic of moron promotion led the scientists to speculate that Administratium is spontaneously formed whenever morons reach a certain density – a hypothetical quantity referred to as 'Critical Morass'. ●

Source: *The Innovation Journal*  
● [www.innovation.cc](http://www.innovation.cc)

## CENTRE OF EXCELLENCE Gold Medal (Romsey) Ltd

# The dream team

DIY INVENTORS' PRAYERS COULD BE ANSWERED...

**F**ROM A SIMPLE drawing, sample or prototype of a DIY or power tools product, a Hampshire company endeavours to manufacture an inventor's product, ship it to the UK and distribute to buyers – at no cost to the inventor.

Sounds too good to be true? Not according to Eric Lane, managing director of Gold Medal (Romsey) Ltd. "All we need from inventors is their time," he says. "We do the rest."

With a manufacturing base in China and a raft of customers across the globe – including B&Q and QVC in the UK, Casterama and Carrefours in France, and Lowe's, Sears and Walmart in the USA – Gold Medal have developed a 7-point plan to take an idea from concept to sales and distribution

which asks little of the inventor apart from contractual and royalty agreements and a patent (which they also advise on).

"We'll sign NDAs and would hope to give a decision at our initial evaluation meeting," said Lane, who has over 40 years experience in retail buying and sourcing.

"But I would plead with inventors to research their product's markets first – because most of the ideas brought to us already exist in one form or another." ●

● **Gold Medal (Romsey) Ltd**  
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**Greatbridge Road, Romsey**  
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**Tel: +44 (0)1794 519 933**  
**Fax: +44 (0)1794 519 991**  
**information@goldmedalco.com**  
**www.goldmedalco.com**

### POWER PEDAL

**IT IS A LOW-TECH WAY to improve cyclist safety. Instead of battery-powered lights mounted on bikes, an inventor in the UK has designed bicycle pedals fitted with rear, side and front-facing ultra-bright LEDs. The pedals, designed by Richard Hicks, founder of Pedalite, are fitted with small dynamos that produce electricity as the pedals turn. Some of this is stored in a small supercapacitor, which powers the lights when the bike is standing still.**

Source: *New Scientist* magazine, 25 June'05

● **Pedalite Ltd, 12-50 Kingsgate Road, Kingston Upon Thames, Surrey KT2 5AA**  
**Tel: +44 (0)20 854 74020 Fax: +44 (0)20 854 71569 www.pedalite.com**

### WEBSITE OF THE MONTH

**www.royalsoc.ac.uk**

The Royal Society is the independent scientific academy of the UK, dedicated to promoting excellence in science. It plays an influential role in national and international science policy, supports developments in science, engineering and technology and hosts exhibitions and free public lectures.

### Woman fitted with world's first 'bionic' device

A 46-YEAR-OLD WOMAN has been fitted with the world's first 'bionic' device that is capable of producing coordinated fine hand and arm movement.

The woman has suffered two strokes that have affected her control over her left arm. On 13 May neuro-rehabilitation experts at the University of Southampton inserted five implants into the limb, each measuring 1.7 centimetres by 2.4 millimetres. These receive power and stimulation commands from a radio-frequency coil fitted to her arm and connected to a control unit.

The implants are selectively placed to stimulate key nerves controlling both deep and superficial muscles, allowing the patient to extend her elbow and wrist and open her hand. The system is intended to re-educate weak and paralysed muscles by supporting, rather than replacing, voluntary movement.

Source: *New Scientist* magazine, 21 May'05

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