



**Islander May 2014**

## **Technology Update**

### **Current Communication - Gurus Past, Present and Future**

Each month since the start of the year, we have printed a picture of a communications guru in this magazine, and another appears this month. Each of these guys has invented a key element of communications technology which we all use every day. Each one of these technologies has been extremely important in helping us all to do what we do today, and they have all been extremely successful at connecting us to the future.

A question has been posed alongside each picture each month, "Who is this?" I wonder how many of you have guessed or know who these gurus are? Each photo has included a clue by the accessory they are using or the background.

#### **January - Alexander Graham Bell – the telephone**

In January the guru was the eminent Scottish scientist, inventor, engineer and innovator Alexander Graham Bell, who lived from 1857 till 1922. He is credited with having invented the first practical telephone. He was born in Edinburgh and studied at my alma mater Edinburgh University. Both his mother and wife were deaf and this profoundly influenced his life's work. His research on hearing and speech further led him to experiment with hearing devices, which eventually culminated in Bell being awarded the first US patent for the telephone in 1876.

#### **February - Martin "Marty" Cooper – the cell phone**

Our February guru was Martin "Marty" Cooper who is considered to be the "father of the cell phone". Born in December 1928, in Chicago, USA, he is an American pioneer and visionary in the wireless communications industry. With eleven patents to his name, he is recognized as an innovator in radio spectrum management.

While at Motorola in the 1970s, Cooper conceived the first handheld mobile phone (distinct from the car phone) and led the team that developed it and brought it to market. He is also cited as the first person in history to make a handheld cellular phone call in public.

#### **March - Sir Tim Berners-Lee – the Internet**

Our March guru is a relative youngster compared to the two above. Born in 1955, Sir Timothy John "Tim" Berners-Lee, OM, KBE, FRS, FREng, FRSA, DFBCS, also known as "Tim BL" is a British computer scientist and is best known as the inventor of the World

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Wide Web or the Internet.

On March 12th, 1989, Sir Tim Berners-Lee proposed making information sharing possible over computers, using nodes and links to create a "web" that would eventually stretch worldwide and become the modern Internet. Now, 25 years to the day after he disseminated that proposal, Berners-Lee has called for the Internet which he invented to stay free and open.

### **April - Sir Arthur C Clarke – communication satellites**

Sir Arthur Charles Clarke, CBE, FRAS, born on 16<sup>th</sup> December 1917 and died 19<sup>th</sup> March 2008, was a British science fiction writer, science writer, inventor, undersea explorer, and television series host.

He is perhaps most famous for being co-writer of the screenplay for the movie 2001: A Space Odyssey, considered by the American Film Institute to be one of the most influential films of all time.

Although he was not the originator of the concept of geostationary satellites, one of his most important contributions may be his idea that they would be ideal telecommunications relays. He advanced this idea in a paper privately circulated among the core technical members of the BIS in 1945. The concept was published in Wireless World in October of that year. Clarke also wrote a number of non-fiction books describing the technical details and societal implications of rocketry and space flight. The most notable of these may be The Exploration of Space (1951) and The Promise of Space (1968). In recognition of these contributions the geostationary orbit 36,000 kilometres (22,000 miles) above the equator is officially recognised by the International Astronomical Union as a Clarke Orbit.

So who is the guru featured this month and what is his connection with communications?

### **A possible new guru in the making**

A guru is a person who is a teacher, who imparts knowledge. It was originally a Sanskrit term meaning "teacher" or "master".

During the Palma Superyacht Show we will be running the latest in our "Connecting You to Your Future" series of seminars. Our focus with these seminars is to "impart knowledge" about the latest in marine communications technology. We are delighted to have Håkan Olsson, Senior Director of Marketing at the Kymeta Corporation making the Keynote presentation. Kymeta is the US company which has invented the flat panel satellite antenna. In a few years' time, this unobtrusive mobile technology is likely to be installed in every moving vehicle from yachts, to trains, to planes and of course cars.

In a few years' time, we could well be adding the inventor of the flat panel technology metamaterials to our rogues gallery of communication gurus, and currently he is only 30!

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So please come to the seminar on Friday 2<sup>nd</sup> May and learn about this new game-changing technology and in years to come you can tell your grand children “I was there when this was invented!” The details of the seminar and registration are on our website home page.

### **Fitness and Health Monitoring – Smart Watch Wearables**

The Samsung Galaxy S5 was launched on Friday 11<sup>th</sup> April in 125 countries worldwide simultaneously, and then another 25 over the weekend. It achieved 30% more sales than the Galaxy S4, exactly what this Korean giant was hoping for this after their recent profits warning. It seems that most people who want to own a smartphone today already have one, making it a lot more difficult to sell new ones. However that’s pretty standard news these days, and I’m more interested in what it has to offer...

It has a heart rate sensor, which has to be very useful for current investors in Samsung. Unfortunately, as one of its new main features, it’s decidedly underwhelming. However, it is compatible with the Gear Fit watch, which has a heavy focus on fitness tracking, packing accelerometers for activity and step counting as well as the built-in heart rate monitor. The watch feeds data into Samsung’s improved S Health App for tracking your activity and general wellbeing.

The heart rate monitor works well, as long as you keep still and do not talk during measurement, but the pedometer function was very inaccurate compared to a dedicated wrist-worn fitness tracker like the Misfit Shine. The Gear Fit will also track your sleep, but its chunky body does not make it appealing to wear in bed.

So, it isn’t great when compared to the Fitbit. The Fitbit is a slim, stylish device, which you wear constantly on your non-dominant wrist. During the day, it tracks steps taken, distance travelled, active minutes and calories burned. At night, it tracks your sleep quality and wakes you with a gently vibrating silent alarm in the morning. You can simply check out the lights on the wristband to see how you are doing against your personal goal. It’s a good motivator to encourage you to be more active.

It’s very unobtrusive, relatively accurate, but a little compulsive. You can set a target number of steps to achieve during a day, and it beeps at you once this has been achieved. The downside is that it doesn’t register steps in the gym when on a treadmill as it needs you to move forward to achieve a “real” step. It tracks your sleeping pattern, how restless you are, and how often you wake up. It works with blue tooth with an App on most smartphones. For someone suffering from OCD, it’s both fascinating and dangerous!

Roger Horner of e3 Systems

For further information on any of the above, please contact us.

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