

TOUGHNEWS

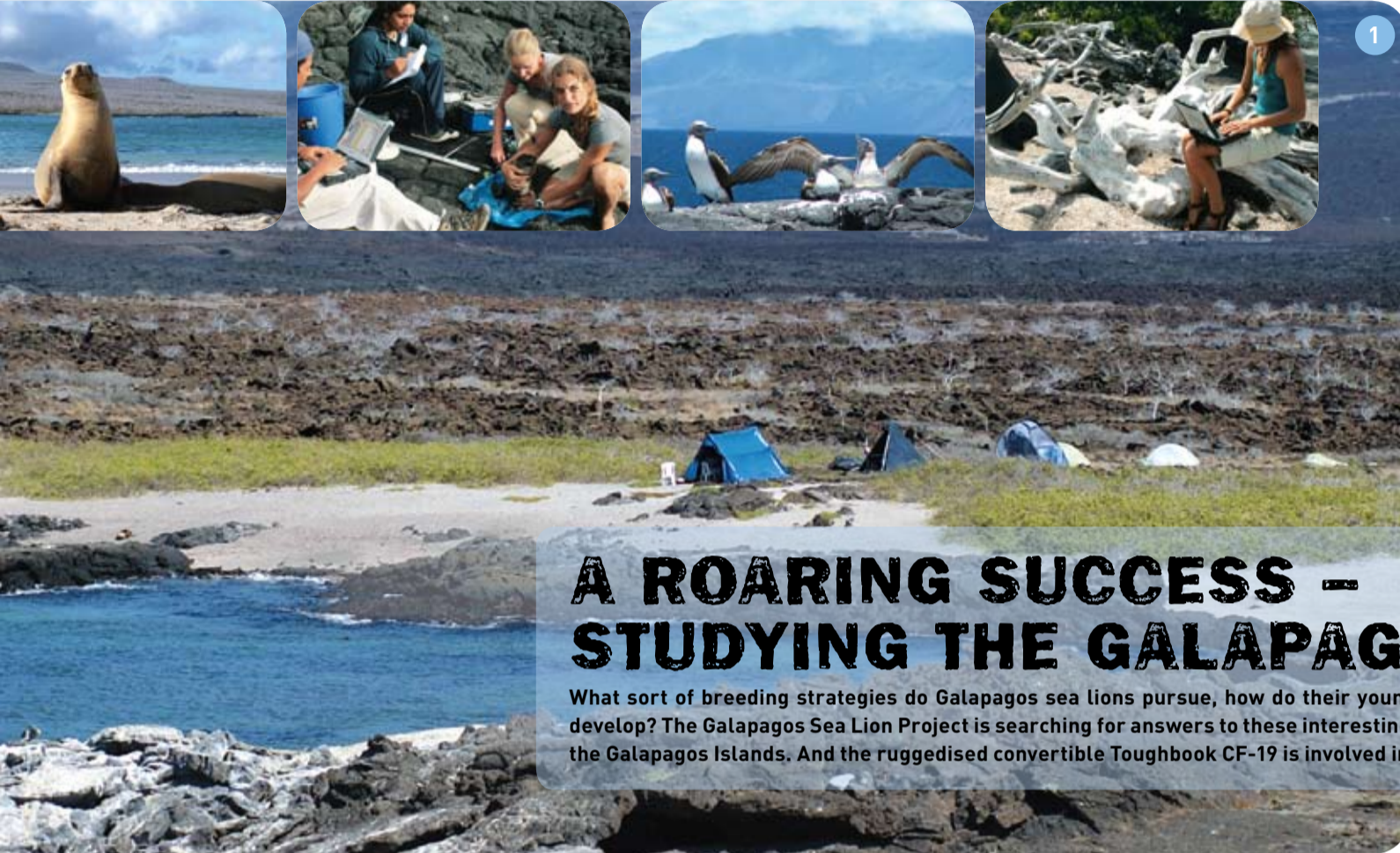
Leicestershire police force: taking the office out on the beat.



Dakar Rally 2.0: the adventure continues.



Time for a robust prize!



A ROARING SUCCESS - STUDYING THE GALAPAGOS SEA LION

What sort of breeding strategies do Galapagos sea lions pursue, how do their young grow and how does their diving behaviour develop? The Galapagos Sea Lion Project is searching for answers to these interesting questions in the unique and remote world of the Galapagos Islands. And the ruggedised convertible Toughbook CF-19 is involved in the research too.

A team from Bielefeld University have travelled half way around the world to a unique microcosm in order to carry out their field research – to the volcanic Galapagos Islands, which are one of the last remaining substantially unspoilt biotopes in existence. The focus of their work is the sea lions there. Postgraduate student Jana Jeglinski is a member of the team and is responsible for examining the animals' diving behaviour. And in this environment that combines both water and blazing sunshine, the obvi-

ous choice when it comes to hardware is the convertible Toughbook CF-19. It is resistant to dust in the dry conditions of the camp and is resistant to the wet conditions of the coastline buffeted by the surrounding seas. And what's more, the display is easy to read, even in bright sunlight.

Diving for data

Data is collected by small recording devices that are carefully attached to the sea lions' backs – a method which has been used time

and again, and which is harmless for the animals. Two weeks later, the animals are caught once more and the data is downloaded and transmitted to the Toughbook CF-19, where it is stored safely during the choppy boat trips, even if the hardware is knocked or accidentally dropped. A particularly practical feature is the pivotal touchscreen, which makes it possible to turn the convertible Toughbook CF-19, weighing a mere 2.3 kg, into a tablet PC in next to no time, for even easier data input.

resilient, and is also very compact and light, so it's a joy to work with. The CF-19 has been covered in sea spray, baked by the equatorial sun and used in an environment in which the air is full of brine. I've even once used it to fend off a territorial male sea lion." The Galapagos Sea Lion Project will be returning in March to conduct further studies during the rainy season.

1 A world in which nature rules: the Galapagos Islands. 2 It takes research to be able to understand nature. And the convertible Toughbook CF-19 does its bit too.

THREE LOTS OF 1,000 CANDELA AND A TOUCHSCREEN

When it comes to using hardware in extreme conditions, the standards are set by the fully ruggedised Toughbooks CF-19 and CF-30. And in the new MK3 versions, they now boast improved display technology and brightness of 1,000 candela – twice as much as before in the case of the CF-19! Both now also feature integrated Gobi modules from Qualcomm, making communication more flexible than ever before. And

with a 160 GB main memory, the CF-30 now offers even more space for data storage. Thanks to the newly integrated touchscreen on the semi-ruggedised Toughbook CF-52, you can now have mobile efficiency at your fingertips. In addition to this greater data inputting convenience, the display brightness has also been significantly increased – even with an impressive battery life of up to eight hours. **More on page 3...**



Our Product Development Philosophy is a simple one: to continuously improve our range of products to improve the efficiency of our client's business operations and enable them to realise the return on investment in our products. We've just released the latest, improved variants of our fully ruggedised flagship models the CF-19 and CF-30 that have seen evolutionary improvements to the usability of the devices whilst maintaining our legendary rugged features and very low failure rates. Also in our semi-ruggedised category we've listened very carefully to the demands of our customers and introduced a new special version of our CF-52 with touchscreen and LED down-lighting. All Toughbook models have one thing common and this is the balance between mobility, ruggedisation and battery life. This is of great importance, especially if we look at the choice of processors we select, the Intel® Atom™ processors

integrated into our healthcare device, the CF-H1 and our groundbreaking handheld device, the CF-U1 have been specifically chosen to feature on performance whilst delivering ultra long battery lifetimes, all in a platform that can be cooled sufficiently without the need for a fan in the device. This is Toughbook technology at it's best! I'm proud to say that in these tough economic times, we have a range of products and services that can truly help our clients streamline their efforts to navigate through this difficult period and to emerge as stronger companies when the good times return.



Jonathan Tucker
Product Head
Panasonic Computer Products Europe

EDITORIAL

POOR TIME MANAGEMENT IS A CRIME TOO

Crimes are usually solved at the crime scene, and not in the office. But information nevertheless needs to be processed and passed on. The police in the English county of Leicestershire have come up with a way of reducing bureaucracy without adversely affecting the data management side of things. The solution is robust and mobile – and goes by the name of CF-19.

Paperwork is a necessary evil, even for the police. But it doesn't necessarily always have to be bothersome and time-consuming. Because the police in Leicestershire have identified a way of making their offices mobile and also of giving them access to their usual PC environment when out on the beat. In the past, the police officers had to return to the station in order to share information and file their reports, thus wasting valuable time and increasing their overtime hours to boot. But now, all it takes is mobile access via the touchscreen of the convertible Toughbook CF-19 to put all the necessary information and more than 70 system applications at their fingertips when out and about.

All the facts, wherever they go

There are 200 CF-19s in use throughout Leicestershire, each of which is equipped with 3G and GPRS. Docking stations turn the police officers' patrol cars into mobile offices, and even make it possible for the Toughbooks to be mounted vertically. James Pearce, who is the IT analyst in charge of the system, comments: "The police officers arrive at the crime scene with all the information they need and can add new information relating to the case directly to the system whilst they are there. This is unique in England!" He estimates that approximately a third of a police officer's working hours is consumed by time spent in or travelling to the office. In

other words, their efficiency could potentially be increased by around 30%.

Quick and easy identification in the police line-up

Choosing which model to use wasn't much of a trial, as the convertible Toughbook CF-19, which serves as both a notebook and a tablet PC, stands out due to its robustness and resistance to shocks, dirt and water. It can also run for up to nine hours without needing to be recharged and features a bright display.

A case for the future

The police officers are impressed too, and Inspector Sanjiv Pattani, Mobile Information Project Manager, is already thinking ahead: "The next step could be recording witnesses' statements then and there at the crime scene." There are sure to be all sorts of ways in which the flow of information could be improved and police work could be made more efficient and more successful. And the CF-19 is ready and raring to go.

1 The dashboard attachment for the CF-19: all the necessary information at the ready, even when the chase is on. 2 When the Leicestershire police are called out, they now take their office with them.



HOW SPORT IS DOING ITS BIT FOR INTERNATIONAL RELATIONS

In addition to being good for you, sport is also a great way in which to forge links. Between Germany and developing countries, for example. Every year, experts are sent out to these countries to foster talent there and train trainers. Dr Joachim Prinz is one of those experts and his personal assistant is the CF-30.



The German government's Interministerial Committee is responsible for evaluating and deciding upon the sports promotion applications submitted by developing countries. Experts from the German Olympic Sports Federation (DOSB) and other such associations are then nominated to implement the proposals. Former national coach of the German Athletics Association (DLV), Dr Joachim Prinz, is involved in the process for the 16th time. Wherever he is allocated to, it is his job to provide theoretical and practical training in the country's native language, without the assistance of an interpreter. His work brings him into contact with everyone from up-and-coming trainers to top athletes in training for their respective world championships or the next Olympic Games. On his travels, Dr Prinz invariably finds himself in countries characterised by climatic extremes, such as Sri Lanka, Guatemala, Gambia and India. So wherever he goes, he travels with a fully ruggedised Toughbook CF-30, which is highly robust thanks to its magnesium

alloy casing. It also features a special dirt and water-resistant seal that allows it to admirably cope with 96% humidity – often even in the early hours of the morning at the training grounds he visits. It can also effortlessly withstand temperatures of up to +60 °C. Not only is the tropical sun hot – it is also bright. But with a brightness of 1,000 candela/m², the display of the CF-30 is more than able to cope. The hardware is subjected to a sudden change of temperature and humidity conditions when Dr Prinz goes back to his air-conditioned hotel to analyse his latest video footage. He can't afford to have equipment that lets him down now. And it doesn't, so Dr Prinz is able to make another valuable contribution to international relations.

1 Dr Joachim Prinz is currently working in the dynamic city of Hong Kong. 2 When it comes to top performance, the CF-30 is just the ticket. 3 With a display brightness of 1,000 candela, the CF-30 is easy to read even in bright sunlight.

THE BUSINESS RUGGEDISED MICROSITE: GIVING YOU THE LOW-DOWN

Ultra mobility has never been so light, so stylish and so practical. But which business ruggedised Toughbook suits you best? Find out by visiting our new microsite.



Business ruggedised Toughbooks are great when travelling or when in the office, and the CF-F8, CF-T8 and CF-W8 have all successfully combined robust performance with lightness, elegant design and a battery life of up to eight hours. But each model can boast its own particular strengths. And you can now find out what those strengths are in detail and compare all the different models at our new microsite at www.toughbook.eu



A complete overview

The CF-F8 is a 14.1" widescreen notebook weighing just 1,660 g, while the CF-T8 is even lighter at 1,385 g and measures 12.1" with a touchscreen. Then there is the ultra light CF-W8 with an optical drive, weighing in at a mere 1,280 g. Visit the business ruggedised microsite and you will find downloadable fact sheets in five European languages, a gallery of all the product details, and video clips for a better impression of the product range. There are also all the technical specifications and a practical model comparison tool to help you choose between the products. And the list of dealers will help you to locate your nearest point of mobile business excellence.

UNVEILED UNDER THE SPANISH SUN: THE NEW CF-19, CF-30 AND CF-52

What do you get when the epitome of robustness is made even more robust? And what are the advantages of the first ever semi-ruggedised Toughbook fitted with a touchscreen? The answers to these questions were delivered in detail at the unveiling of three new Toughbooks in Andalusia, southern Spain.

More than 30 journalists from throughout Europe travelled to the Ascari Race Resort in order to scrutinise the new Toughbooks CF-19, CF-30 and touchscreen CF-52. And it proved to be well worth their while because not only were they entertained by the speedy skills of Panasonic Toyota Racing Team drivers Timo Glock and Kamui Kobayashi on the racetrack; they also got to experience the brighter LED display technology and numerous other improved details on the CF-19 and on the CF-30 – the flagships of the fully ruggedised range. Not forgetting the innovation of a semi-ruggedised Toughbook CF-52 featuring an anti-reflective touchscreen with an extremely bright 1,000-candela display.

CF-19 and CF-30: shining examples of robustness

Another new development is the LED display lighting of the two top models' touchscreens. At 1,000 candela of brightness, they are perfectly legible even in direct sunlight and from any angle, making them even more versatile than before. What's more, their energy consumption has now even been reduced and their rechargeable battery life extended. And then there are their communication skills, including integrated Gobi modules from Qualcomm to support GSM dial-up connections, GPRS, Edge, 3G and HSPA, with a transmission rate of up to 7.2 Mbit/s. In terms of resilience, the Toughbooks CF-19 and CF-30 continue to live up

to the exacting US military standard MIL-STD 810F and the IP 54 norm.

CF-52: robust performance taken one step further

The new LED display is just one advantage. In addition, the 160 GB hard drive, which has a flexible connection to the motherboard and is protected by shock-absorbent foam, guarantees you mobility when on the road and also reduces data loss caused by vibrations or inadvertent drops. The fast Intel® Core™ 2 Duo processor and mobile communication technology round off its top performance, making it more than ready for the rough and tumble of everyday outdoor use.



CF-19MK3



CF-30MK3



CF-52
Touchscreen

Mobile computing platform: Intel® Centrino® 2 with vPro™ technology and Intel® Core™ 2 Duo processor (CF-19: SU9300/CF-30: SL9300).

Operating system: Original Windows Vista® Business or Original Windows® XP Professional (downgrade).

Fully ruggedised Toughbooks: Vibration and shock-resistant in accordance with MIL-STD 810F, special water and dirt-resistant seal in accordance with IP 54, withstand drops from heights of up to 90 cm (when switched on).

Hard drive: 160 GB (SATA, shock-protected).

Display: Non-reflective active-matrix colour display with a touchscreen: 13.3" (CF-30)/10.4" (CF-19) LCD with 1,000 candela/m² brightness.

Battery life: Long battery life of up to 9 hours (Vista model) or 10 hours (XP model).

Mobile performance: Integrated WLAN and Bluetooth (optional Gobi HSPA 7.2M module for fast data transmission).

Mobile computing platform: Intel® Centrino® 2 with vPro™ technology and Intel® Core™ 2 Duo processor P8400.

Operating system: Original Windows Vista® Business or Original Windows® XP Professional (downgrade).

Semi-ruggedised Toughbook: Vibration and shock-resistant in accordance with MIL-STD 810F, withstands drops from heights of up to 76 cm (when switched on).

Hard drive: 160 GB (SATA, shock-protected).

Display: Non-reflective active-matrix colour display with a touchscreen: 13.3" with LED keyboard lighting and 1,000 candela/m² brightness.

Battery life: Long battery life of up to 8 hours.

Mobile performance: Integrated WLAN and Bluetooth (optional Gobi HSPA 7.2M module for fast data transmission).

THE NEW DAKAR RALLY: ON THE ROAD TO SUCCESS?

The Dakar not held in Africa and Ellen Lohr no longer behind the wheel – what has become of the ultimate rally? It's a spectacular race across fascinating landscapes involving a host of enthusiastic individuals, now with Ellen Lohr as a team manager. And the Panasonic Toughbooks CF-19 and CF-W7 lined up at the start of this year's rally in South America.



The Dakar Rally started in Buenos Aires for the first time in 2009. And this year's rally was also the first outing for Ellen Lohr as manager of the FleetBoard Mercedes-Benz team. The rally consisted of 14 legs across Argentina and Chile totalling 9,578 kilometres, and also included two Andes crossings. This was by no means the first test of endurance the fully ruggedised Toughbook CF-19 has ever undergone, but weathering an array of extremities such as knocks, dirt and dust, moisture and extended usage with no recharging opportunities was nevertheless quite a challenge for it to rise to.

Crucial data takes the rough with the smooth

In spite of there being less sand than in Africa on this year's rally, both man and machine were really put through their paces, going full throttle down demanding dirt tracks and off-road stretches. But that's just what Panasonic Toughbooks are made for. Thanks to the CF-19's magnesium alloy casing and specially cushioned hard drive,

for example, the recorded data could be transferred and analysed each evening back in the bivouac, for the mechanics to fine-tune the vehicle to the next day of racing. The next day, with sand and dust everywhere, it's the Toughbook's special seal that really comes into its own, concealing all the sockets, plug-in connections and ports behind covers. Panasonic also opts for a fanless design in the case of most Toughbook models, and the generated heat is given off by the casing instead.

The first high-speed office

As a business ruggedised Toughbook, the CF-W7 is usually more suited to office environments. But it's now in the cockpit of one of the FleetBoard team's supply trucks. Because Ellen Lohr is well aware of the importance of mobile communication: "During this sort of media-heavy event, things like PR reports, blogs and other information can serve as an additional impetus when they can be sent and received along the way." This is done with the aid of trans-

mission options such as UMTS, HSDPA and GPRS in the Toughbooks CF-19 and CF-W7, all of which are as fast as the rally itself. And with such long battery lives, the long stretches of driving with no battery re-charge availability need not pose a problem. Even the CF-W7 can keep going for eight hours without being recharged. But it certainly doesn't hurt to have a car charger on board during the rally stages.

It's the taking part that counts

Two of the team's three participating vehicles made it to the finishing line and were ranked 76th out of 177 cars and 38th out of 81 trucks – both respectable results that really put a smile on Ellen Lohr's face: "We're ever so happy." Incidentally, Ellen and her team were not the only ones to place their trust in Panasonic Toughbooks during this year's Dakar. And next year, she hopes to get back behind the wheel herself, to wow the millions of spectators wherever the rally is held. Her Panasonic Toughbooks are in the preparation stage already.

1 Argentina and Chile have just as much to offer as Africa. 2 All done and dusted! 3 Ellen Lohr traded the cockpit in for the "control room", ably assisted by the Toughbook CF-19. 4 Perfect for admin duties in the supply truck: the Toughbook CF-W7. 5 The rough surface conditions often spelt the end for the tyres. But not for the Toughbooks.

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TIME FOR A ROBUST PRIZE!

If you need to know the time in an extreme setting, you can always take your Toughbook with you. Alternatively, you could take one of three original Touch Expert watches manufactured by the long-standing Swiss watchmaking company Tissot. This multifunctional watch features a tactile glass face via which features such as an atmospheric pressure gauge, an altimeter and a compass can be activated. TOUGHNEWS subscribers are entered into the prize draw automatically. So good luck! Not a subscriber yet? Simply register at <http://toughbook.eu/raffle/watch/default.aspx?lang=eng>

