



PANASONIC TOUGHBOOK HELPS ENVIRONMENT AGENCY WITH HIGH-TECH MONITORING OF RIVER WATER LEVELS

TOUGHBOOK CF-19 AND CF-20

Operating around 7,000 hydrometry and telemetry sites on rivers across England, the Environment Agency monitors the measurement of river flow, river levels, ground water levels and rainfall using rugged Panasonic Toughbook notebooks and the latest Acoustic Remote Control boat (ARC-Boat) technology.













"In essence, the Panasonic Toughbook notebooks and associated technologies we use help us to get information out to the public in a more timely, more accurate and efficient manner."

The data collected using the Panasonic Toughbook CF-19 notebooks is important for monitoring water levels and is the basis for issuing flood warnings or predicting and managing drought conditions.

As well as collecting data from the telemetry positions alongside the rivers, the Panasonic Toughbook devices are also integral in the use of the Environment Agency's latest technology, the Acoustic Remote Control boat (ARC-Boat), designed to measure river water flow.

"We use the ARC-Boat with its on board sensor to measure the flow rate in the river, which helps us to calibrate the information coming from the telemetry stations and ensures we are providing the right information to the public and not causing undue alarm or equally failing to recognise a flood that's imminent," explained Nick Everard, Technical Adviser at the Environment Agency.

"The Panasonic Toughbook devices are very important to us because they are used to configure and set-up all of the telemetry systems. We also use them with the ARC-Boat to transmit all the river flow information from the boat to the Panasonic Toughbook notebook via Bluetooth."

The Environment Agency has been using Panasonic Toughbook notebooks for more than 8 years, first working with the Toughbook CF-18 and now the Panasonic Toughbook CF-19 notebooks.

Ideal devices for outside use

"The Panasonic Toughbook devices are ideal because they are rugged, they have a good battery life and are quite lightweight to carry around," said Nick. "The most important measurements we take are during the height of flood events when the weather can be very, very poor and we really need to be able to count on the devices in those conditions."

The agency is now also testing the latest Panasonic Toughbook CF-20 fully rugged hybrid that can be used as a notebook or a tablet.

"The Toughbook CF-20 is very appealing to us because we can use it in laptop format or tablet format," explained Nick. "Most of the applications that we use at present benefit from the laptop format but we hope to gradually move to tablet for the ease of use and lighter weight that it offers us."

"In the Environment Agency we are using technology to monitor the environment and there is an ever growing range of tools that we can use to make it safer and faster. Most of these technologies operate and interface with our Panasonic Toughbook devices. The major floods of the winter of 2015/16, for example, created a lot of work for us but much of the information we brought in to manage that event and to issue warnings out to the public came from systems that we manage with our Panasonic Toughbook devices."

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Toughbook CF-19

The market-leading, rotating screen, convertible notebook, which sets the benchmark in ruggedness.

- Intel[®] Core[™] i5 3610ME vPro[™] Processor
- Windows 8.1 Pro
- Vibration and shock resistant (MIL-STD 810G)¹
- Water and dust resistant (IP65², MIL-STD 810G)
- Extremely bright 10.1" LCD with Dual Touch or Touchscreen (up to 6.500cd/m² transflective plus)
- Ambient light sensor for advanced power management

Toughbook CF-20

The Panasonic Toughbook CF-20 delivers a new level of unrivalled versatility for mobile business computing as the first fully rugged detachable notebook.

- Intel[®] Core[™] m5-6Y57 vPro[™] processor technology
- Windows 10 Pro
- Intel® HD Graphics 515
- · Next generation IPS outdoor display technology
- $\bullet~10.1"$ high brightness WUXGA (1920x1200) display (up to $800 cd/m^2)$
- Capacitive 10 finger multi-touchscreen, glove enabled







