

## Call To War

BY CHRISTOPHER ALLBRITTON

**P**ay no mind to the massive convoy of media trucks outside the Palestine Hotel in Iraq's occupied capital. They're passé. The age of the modern wired war reporter is here, and it doesn't lie with the TV crews.

In April, I decided to cover the war in Iraq as a mobile war reporter, meaning I had to travel as light as possible. I spent a month in a post-post-modern experiment, running a mobile wire service using e-mail, a satellite phone and a laptop—as well as a fair amount of guts and insanity. My gear performed superbly, after a few initial snafus, and allowed me to cover the war in ways that the big media

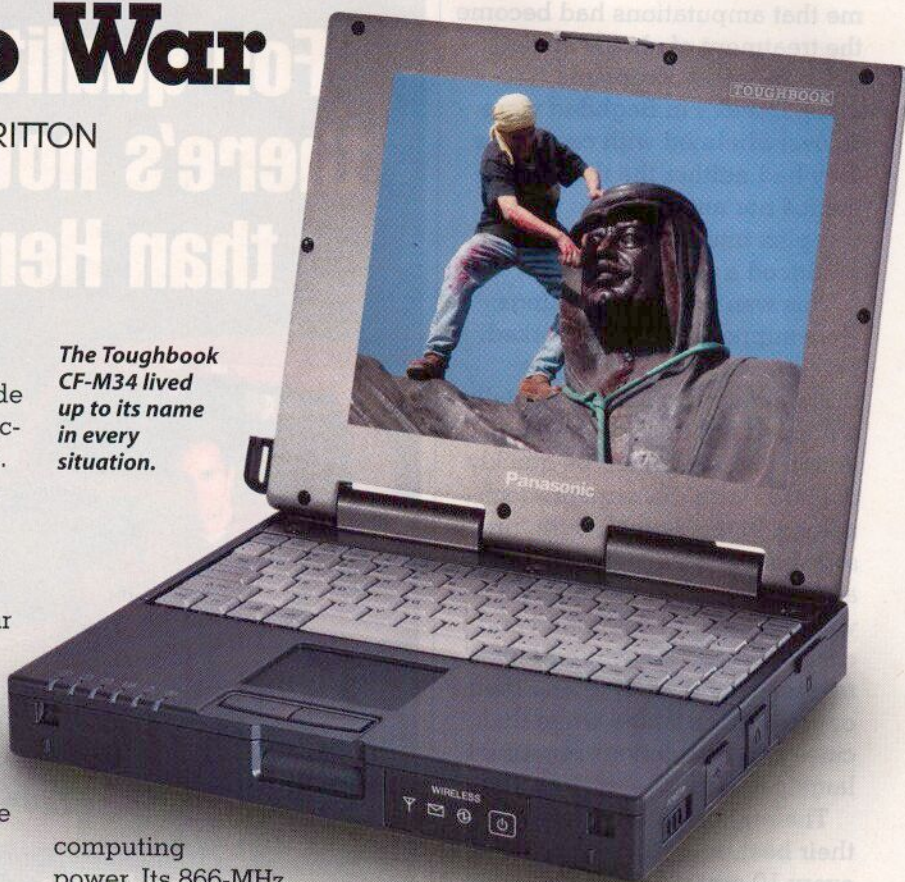
### ELECTRONICS

guys can't or won't. I was more flexible, more mobile, and better able to get around the country to be in more places more quickly than trains of SUVs marked "CNN."

#### The Laptop

Whereas previous war reporters followed the dictum, "Have typewriter, will travel," modern reporters rely on laptops. I chose the Panasonic Toughbook CF-M34 (\$3200), which is sometimes used in the field by the Army's 82nd Airborne Division. It's a ruggedized, water- and dust-resistant mini notebook, weighing 3.8 pounds and packing plenty of

*The Toughbook CF-M34 lived up to its name in every situation.*



computing power. Its 866-MHz Mobile Pentium III was more than enough to handle my e-mail and word processing duties as well as run Adobe Photoshop Album 1.0, my software for managing photos. The 256MB of RAM doesn't hurt either. But its real attraction is reflected in its name. The Toughbook, with a magnesium alloy case, went over mountains, crossed streams and dodged bullets, all with dogged determination. Its battery life is superb—almost 5 hours on a full charge, which is just about how long it took me to get from Arbil in Iraqi Kurdistan to Baghdad. Its LCD screen, while small and limited to 800 x 600 pixels, can be adjusted for viewing in bright sunlight as well as the dark. And it's got all the ports you need: Ethernet, USB, modem, serial, PC Card

and a docking slot, for when I needed to use it with a docking station (which was never). It doesn't have a CD-ROM or floppy drive built in, but those external components can be added via the USB port.

#### The Satellite Phone

I contacted Iridium, the satellite phone system that seemed on the verge of going under a few years ago, to ask about my options. I needed data and voice, in the Middle East, with reliability and low cost. Iridium filled the bill, although Thuraya was a close runner-up.

Iridium offers a direct gateway to the Internet using a data kit, which the company loaned to me. It's basically a serial connector that plugs into the bottom of the Motorola

9505 satellite phone (\$1495) and a cool, James Bond-like tripod for the phone.

Once I installed the satellite phone software—a simple procedure involving a couple of clicks on the installer software—the phone was ready to use. All the settings for the phone were loaded from the installer. After that, I could get online anywhere in the world.

The procedure for filing stories was simple. I would type up my dispatches for the day in my e-mail program. Then, I would click the Connect button on the Apollo Emulator window, which is the phone software, and wait to get online. After that, I could send and receive e-mail and even surf the Web—if I was patient. The connection between the phone and the computer is a decent 19.2 kilobits per second (Kbps), but the data transfer rate over the Iridium network is quite slow. I felt like I was back in the era of 2400-baud modems. But at least it worked, and I kept reminding myself that I was e-mailing this column from Baghdad by bouncing signals off a series of satellites. The CIA would have killed for this technology 10 years ago.

I did have trouble with the service in the beginning. For some reason, the phone wouldn't transfer data to the laptop using a dynamic IP address, but the very helpful folks at Iridium set me up with a static address—while I was having the laptop spliced into a Turkish hotel's power grid by a bellhop who was also an electrical engineer—and it has worked like a champ ever since.

Be warned that satellite data transfers are highly susceptible to poor signals and interference. A slight drop in the signal—which is fairly common,

given the nature of the technology—can lead to lost connections. Luckily for me, the Apollo software would automatically redial and pick up where I was when I lost the connection. Anything from slight overhead cover to poor weather conditions to the presence of other satellite transmitters, such as the forest of transmitter dishes you might find in the media circus at the Palestine, could disrupt the signal.

*The Motorola 9505 satellite phone was my link to the world.*

I eventually discovered that getting out in the open away from powerlines, buildings and other obstacles was my best bet. And there are no shortages of wide-open spaces in Iraq. A lot of the country is empty and wild—much of Iraq's territory is uninhabited.

### GPS Receiver

I also had the use of a Garmin GPSmap 76S (\$499) receiver. It's about the size of a PDA but much more useful. Preloaded with maps of the region, the device was able to pinpoint my location, usually to within 20 ft. I was able to easily set up way points—and mark the Kurdish and Arab checkpoints on the roads—and planned to use the tracking function to retrace my steps through the mountains on the border

between Turkey and Iraq. Alas, someone was jamming the signal in the border region and, according to the 76S, I never left Turkey. But once I was inside northern Iraq near Duhok, it started working again. After that, I was able to save my courses and retrace my steps if I needed to. The GPSmap 76S also incorporates a barometric altimeter and an electronic compass. Plenty of memory (24MB) means it can hold lots of MapSource data. It's also waterproof and floats.

### Videophones

What I didn't have (or need) was one of the state-of-the-art videophones that the major networks use. With the combination of a video camera, a satellite phone and the TH1 videophone (\$7950) from 7E Communications, I could have broadcast the herky-jerky video that viewers of CNN, Fox and other networks have come to associate with war reporting. The TH1 is a lunchbox-size device that the phone and the camera plug into. It compresses the video from the camera and transfers it to the phone, which sends it up to a satellite at 128Kbps. While nowhere near broadcast quality, the TH1 can get the pictures to the viewers from anywhere correspondents are able to lug the 9-pound box and get some power. (In the field, car batteries are a favored source of juice when no generators are present.)

### Bottom Line

So there you have it. For about \$5200, plus an adventurous spirit, some pluck and a lot of luck, anyone can become a mobile wire service. While I wouldn't recommend walking into a war zone unprepared, I'm living proof that in-the-field journalism has entered the Internet Age. **FM**

