Computers can be worn on the wrist or on the console, according to personal preference.

entries, but won't affect your dive; you'll know whether you're cold or not, you don't need a gauge to tell you.

Graphic displays using pixels or bar graphs are a waste of power. All they do is duplicate information already given in a more concise and easier-to-read digital readout. Likewise, the time you can stay at your present depth on the air in your tanks is meaningless information. This is nice if you're diving a 30-foot reef and want to know when to turn around and head back for the boat, but knowing that I have enough air to stay at 190 feet for an additional eight minutes does not help me plan my decompression. Dumping my accumulated dive log into a company mainframe is not worth the annual fee. A computer that goes out of range at 200 feet will not meet the requirements of today's advanced wreck diver, or today's diver who would like to advance.

Dot matrix computers are hard to read, especially under low light conditions; worse, the readout becomes invisible when you shine your light on the screen. For people who are farsighted and wear contacts while diving, or who have corrective lenses built into their facemasks, make sure that underwater you can easily make out the digits on your computer. If you have to push the computer so far away that the readout is too small to decipher, you may have to install a magnifying lens on the lower portion of your facemask. Similarly, if you carry your computer on a console, make sure the hose is long enough to get the display screen in focus; if not, you may have to wear the computer on your wrist.

As a cautionary note, people who wear anything on their wrists should beware that an overtightened strap can restrict circulation with deleterious side effects. When I was a novice diver and wore my gauges in such a way, I suffered a case of severe localized bends that not only paralyzed my arm

and turned it solid purple from the shoulder to the fingertips, but was so painful that I lost consciousness. It happened like this.

Before entering the water I tightened the straps enough so my gauges did not flop around the sleeves of my wetsuit. On the bottom, due to the ambient pressure at 140 feet, the neoprene rubber was compressed enough that the gauges became loose. I shoved them farther up my arm where the muscle is thicker and where they stayed in place. Upon ascent, the neoprene expanded and pinched off the flow of blood and lymph. The pain was excruciating. On the boat I had to be helped out of my wetsuit jacket, when it became apparent that something was visibly wrong, although no one knew exactly what. I passed out. When I regained consciousness I was examined by a doctor (and psychiatrist) who fortuitously happened to be on board. My arm did not appear to be any kind of decompression anomaly that anyone had ever heard of, but because of the paralysis and incredible swelling he recommended that I try to alleviate the condition immediately by in-water recompression.

I was helped back into my suit and plunked overboard with a spare tank. The doctor went down with me and stayed with me for an hour, making sure that I remained awake and alert. (This was the only time I have been treated by a psychiatrist.) I felt relief at twenty feet, and stayed there until I was able to flex my fingers again, then my hand, and finally could move my arm. Afterward, my arm was still pretty swollen and it still hurt, but at least the color had returned. Later, due to increasing pain, I drove to the University of Pennsylvania and checked myself in for hyperbaric treatment. After two and a half hours in the recompression chamber, and noticeable relief, the doctor there diagnosed my condition as lymphatic edema—swelling of the lymph system—only the third such case in medical history. He was so excited about it that he took a series of photographs of my swollen arm for the medical texts.

Left: Be careful when swinging a hammer or using other tools that you don't accidently smash your computer; it's been done. Right: Chris Rouse Junior uses a curved section of PVC on which to strap his computer, in that position you have to be very careful when climbing onto swim platforms on into inflatables.