

Orange Juice

By: Phil Ward

Nominations are in for Most Redundant Documentation 2015. Top of my list is the instruction leaflet provided with the "Rug Remedy" Carpet Moth Killer, an exciting new water-based pesticide specifically formulated for use on oriental rugs and carpets. The handy leaflet falls out of the box as you open it, representing a tiny, but ultimately fatal, percentage of global wood pulp, and is headed by the unmistakable directive INSTRUCTIONS FOR USE.

You scan this with all due curiosity, anxious not to poison children or pets, unnecessarily, and you are greeted with the following guidelines: "To be used in conjunction with instructions on the bottle." That's it, apart from an exact repeat of the instructions on the bottle. So yes, the bottle has instructions that work flawlessly in conjunction with this message, particularly as it comes in the same box, but I suspect most people might circumvent the paper version, lacking, as it does, any actual moth killer. Some, it's true, would be completely thrown by the absence of the leaflet: "Are you SURE we follow these instructions on the bottle? I mean, where's the confirmation leaflet that puts the issue beyond all doubt? Hmm, I'm going back to the hardware store to check."

There are two interpretations of "redundant" available here. The first is that, quite simply, the leaflet is of no use. It's a waste of resources. The other is, as we use it in electronic systems, that the leaflet is a backup or fail-safe for the instructions on the bottle. Just as power supplies and computer software often need such safety nets, adding expense, but greater reliability, to things like digital mixing consoles, one supports the other. Trouble is, in this case the redundancy is properly redundant, because the bottle works perfectly well without the leaflet in the destruction of moths, and the leaflet without the bottle is, well, just a leaflet. When they see it, all the moths burst out laughing.

I suspect this is a case of what Charles Perrow is getting at, in his book *Normal Accidents: Living With High-Risk Technologies*, when he refers to the organizational and management errors that contribute to failures in systems that are, to all intents and purposes, much safer because they do have redundant components like power supplies and operating systems. The users of such systems are lulled into a false sense of security by the redundancy, and either take more risks or pay less attention, leading to any one of thousands of tests of human reliability that usually result in what computer nerds call PEBCAK, or ID-10T Error. Look them up.

Overall, Perrow's book, from the 1980s, has encouraged a high-tech society to accept—even expect—catastrophic failures, precisely because of the three unavoidable truths about highly complex and interactive technology. Firstly, the relaxing of due care and attention referred to above, which, with much irony, can occur in inverse proportion to the ever higher levels of training provided in a technocracy. Secondly, the chain reaction from one small failure to increasingly larger ones in systems that are so interdependent. And, thirdly, the administrative and bureaucratic denseness that goes with high-risk technology and that leads—as it clearly did at the pristine-carpeted offices of Rug Remedy—to a kind of operational blindness. His motivation for the book, by the way, was an attempt to understand the nuclear accident at Pennsylvania's Three Mile Island reactor in 1979, so sod the moths. Sometimes there's a lot more at stake.

It's worth bearing this in mind when scanning the announcements at last month's InfoComm exhibition in Florida, where the integration industry took yet more steps toward a networked future. The flood of interconnectivity was striking, and followed on from ISE's festival of digital glue in Amsterdam back in February. Whether proprietary or not, new digital ways of doing what we used to do with analog without batting an eyelid are taking over. The main reason for doing it, I might suggest, is to increase functionality and control by dramatic increments, and all hail that. But it does make the systems a lot less discrete, a lot more dependent on each other and, in no small measure, a lot more complex. It's unavoidable.

Whether or not this means that pro audio is making itself more susceptible to radiation and moths, I'm not saying. I will admit, however, that I frequently feel quite dizzy at trade shows, and my skin itches whenever I'm in California or Florida. You decide.