

A couple of key observations about the oil rig blowout, based on my work on disaster issues.

First, “human error” is a cop-out when you’re dealing with major technology. It’s not like human fallibility is a surprise. Training, good management, and smart design should be the responses, not whining after the fact that the workers weren’t perfect. Or, if human error is unavoidable and the outcome would be catastrophic, you’d better rethink the project.

Second, it’s probably true that this was a very unlikely way for an oil rig to go wrong, but that doesn’t mean much. Suppose this was an eight-thousand-year event at any given oil rig. That is, you’d expect to have such an accident at that rig once in eight thousand years, or to put it another way, the odds in any given year at any given rig are 1 in 8000. You could imagine that the engineers might have thought that was pretty darn safe. (And not just engineers: in the *Benzene* case, the Supreme Court expressed uncertainty about whether a 1 in 1000 risk — nearly ten times greater — was significant enough to worry about.)

A one in eight thousand year accident sounds very remote, but it’s actually a recipe for disaster. As it happens, there are over 800 manned U.S. rigs in the Gulf. So you’d expect an “eight-thousand-year accident” to happen somewhere in the Gulf about once every ten years. If you’re unwilling to live with anything more than a 1% chance per decade that this kind of accident will happen in the Gulf, you need to get the annual odds at any given rig down to 1/800,000!