

# Disabled oil rig alarm points to human failures in Gulf oil spill

As investigators probe the Deepwater Horizon oil rig accident, it's becoming clearer that human decisions regarding key safety equipment were part of the nation's largest oil spill.

By [Patrik Jonsson](#), Staff writer  
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Atlanta —

A disabled fire alarm and critical gas venting systems set to "bypass" likely became part of a complex web of human errors that contributed to the Deepwater Horizon accident at the heart of the [nation's worst oil spill](#).

Despite the high-tech rigging, deep sea drilling is ultimately a man versus nature endeavor. Known among rig workers as the "well from hell," the Macondo Prospect well had pushed back against the Deepwater Horizon's best efforts for weeks by the time of the April 20 blow-out and ensuing explosion.

But on board the nine-year-old rig, efforts to tap the depths of the earth for oil went ahead despite a litany of safety problems. They included documented problems with the blowout preventer that ultimately failed, software problems that stymied workers trying to control the blowout, as well as potential human mistakes ranging from potentially faulty pressure tests to key decisions made by the BP company man on the rig, who last week invoked his right against self-incrimination.

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Symbolic of a complex web of human failures, according to testimony for a 6-member Coast Guard-Interior Department investigative panel, was a fire alarm system that rig managers partially disabled to let rig workers sleep through what were perceived as minor alarms coming from the troublesome rig.

"All these industrial disasters have a combination of human error and mechanical failure, and both Exxon Valdez and the Deepwater Horizon

had both elements involved in the causal chain that caused the disaster," Rick Steiner, a retired professor from the University of Alaska and a marine conservation consultant, [recently told ABC News](#).

The testimony is complicating the picture of who is ultimately to blame for the accident, which led to the spilling of as much as 4.2 million barrels of oil into the Gulf of Mexico.

BP has taken responsibility under the 1990 Oil Spill Prevention Act, but the Obama administration has made clear that it is reviewing the full chain of command and responsibility onboard the rig to include actions by the rig's owner, Transocean, as well as a key subcontractor, Halliburton.

## **'High priority' repairs left undone**

The New York Times earlier this week reported that a September 2009 audit of the rig found 390 "high priority" repairs that had not been done, though it's not clear how many of those problems remained unfixed by the time of the April 20 blowout.

More critically, the manner in which workers and managers interacted with the equipment could have played a role in the disaster, rig worker Mike Williams testified last week. Transocean managers set a key alarm system to "inhibited" because "they did not want people woke up at 3 a.m. from false alarms," Mr. Williams said.

As a result, the alarm didn't go off, Williams said, hampering the effort to evacuate the blown rig. Consequently, the alarm did not sound during the emergency, leaving workers to relay information through the loudspeaker system. In a statement, Transocean says the disabled alarm was not a safety oversight.

Williams also said he was reprimanded for questioning why Transocean had disabled a system for removing dangerous gas from an onboard drilling shack. "No, the damn thing's been in bypass for five years," he said he was told by supervisor Mark Hay. "Why'd you even mess with it?"

Mr. Williams testified that Mr. Hay added, "The entire fleet runs them in 'bypass.' "

The rig exploded after a kick of [methane gas](#) spurted out of the well head, ultimately catching fire from the spark of a diesel generator. Attempts to manually activate the blow-out preventer failed. The

explosion happened on the same day that a number of BP officials were on the rig to give the crew a safety award.

## **Rig culture discouraged complaints**

Immediately after the accident, some workers and their families praised the Deepwater Horizon's safety procedures. But some workers have since testified that the aging rig had a number of safety problems. What's more, they say, the culture on the rig discouraged complaints about safety.

Also in testimony last week, BP official John Guide fought back against the notion that the company is lax about safety. "The culture is that safety is the priority," Mr. Guide said.

Ultimately, investigations like the one taking place outside New Orleans, a criminal probe by the US Department of Justice, as well as numerous congressional hearings, will have to determine the extent to which a corner-cutting culture exists in the offshore drilling industry.

Writing recently in [Popular Science](#), oil rig investigator Jasper Collum found himself having to fight the impulse to blame the Deepwater Horizon accident on a "good ol' boy" culture where a largely Southern workforce are "bent on 'gittin 'r' done' even if that 'done' gets 'got' with bailing wire and spit."

But more than individual mistakes, Mr. Collum writes, the root of the accident runs deep into the core of the oil industry itself, an industry "which is both comfortably in bed with its government regulators and driven by huge operating costs, where minutes can be measured in thousands of dollars."

In that light, he writes, "It's easy to see the motivation to rubber stamp some seemingly small engineering decisions, slowly degrading safety limitations, comfortable in the fact that success last time proved that a certain amount of redundancy is not always necessary. It was those small decisions, which are difficult to track and hard to monitor, that truly led to the disaster we're watching on our televisions now."

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