



Jimmy Harrell (portrayed by Keith Russell in the film version of the disaster) was Deepwater Horizon's top drilling official on the day the rig exploded. He was also the man in charge of the vessel at that time.

How do we know this? Because the National Commission's "Report to the President" gives us the facts:

*Harrell was the top Transocean man on the rig when—as now [April 20, 2010]—the well was “latched up.” Captain Kuchta, who had served on the Deepwater Horizon since June 2008, was in command when the vessel was “unlatched” and thus once again a maritime vessel. (“Report to the President,” pages 20-21 of the PDF version.)*

In other words ... as long as the oil platform was attached to the wellhead, far below the surface of the Gulf, Harrell was in charge of Deepwater Horizon. When the rig was not attached to the oil well, [Captain Curt Kuchta](#) was in charge.

On April 20, 2010—throughout the day and throughout the catastrophe that was to come—the rig was attached to the wellhead. But ... not everyone knew that, especially after the first explosion ripped the rig apart (and crew members had tried to take corrective action).

During the day of the explosion, Harrell was escorting a group of BP executives around the rig. They'd flown-in, by helicopter, to congratulate the crew on seven years without safety issues.

Later that evening, Harrell decided to take a shower in his stateroom. Disaster struck at that moment, blowing apart the entire starboard side of the Horizon. Speaking with his Mississippi accent, Harrell describes the power of the first explosion during his [testimony at the investigation hearing](#):

*...it was a major explosion, followed by a second explosion, a lot of back draft in the living quarters. It totally destroyed the living quarters over there on the starboard side where I was taking a shower in my state room. I managed to get debris out of the way and crawl and walk up towards the bridge...*

At the time of the explosion, Jimmy was one of the people with authority to order an EDS (Emergency Disconnect System / Sequence) which disconnects the oil rig from the wellhead. If the rig is disconnected from the oil well, it prevents blowout material—like gas and mud—from reaching an ignition source on the rig.

During his testimony, Harrell describes how that process works:

*Q. You ... made a reference to disconnect. What are you disconnecting from?*

*A. You disconnect the upper marine riser package [the upper portion of the pipe connecting the rig to the well] from the lower marine riser package [which remains connected to the well after the upper pipe is removed].*

*Q. And how does that activate [in other words, where is the button which starts the EDS process]?*

*A. From...either the driller's panel or the toolpusher's panel [where an EDS button is located].*

*Q. And who has the authority to actually activate that system?*

*A. Well, there's the drill floor—and it could either be the driller or toolpusher, myself, and I guess at times, you know, during a real emergency, even the captain, if we exceeded our safe distance, you know, you can bend that wellhead, you know, if you wait too long.*

It's a very big deal if someone activates the EDS system (which is why so few people have the authority to order it). With the push of a single button, a sequence begins which separates the rig from the well.

The sequence also seals the well, so if an EDS occurs, no one can extract oil from the reservoir using that now-closed well (no matter how much time and money had been spent to drill it). That means the drilling crew has to drill a different path to the oil reservoir before anyone can extract the oil.

In short ... the EDS process is a last-resort method which is used only when absolutely necessary. Even the

captain's authority to order an EDS is restricted.

There is another way to stop a blowout from exploding an oil rig, however. The device is called a blowout preventer (BOP). It's a huge stack of valves and pistons, standing around 57 feet high and weighing around 400 tons, which is placed on the seabed directly above the wellhead:

*The BOP is a stack of enormous valves that rig crews use both as a drilling tool and as an emergency safety device. Once it is put in place, everything needed in the well—drilling pipe, bits, casing, and mud—passes through the BOP. Every drilling rig has its own BOP, which its crew must test before and during drilling operations. (See the PDF version of the "Report to the President," at pages 108-109).*

After the first explosion, Jimmy Harrell managed to get himself to the bridge. When he arrived, he could tell there were serious issues with Horizon's BOP. During the investigation hearing, Jimmy said that the BOP system "wasn't normal." Among other things, yellow lights told him that some of its key functions were "blocked" while other indicators were in a neutral.

In short ... the only way to avoid disconnecting Deepwater Horizon from the wellhead—the Blowout Preventer—appeared to be failing.

In light of a failing BOP, the crew had no other choice but to activate the rig's Emergency Disconnect System. But ... who would order it? Harrell's testimony sheds light on this:

*Q. Was the attempt to do the emergency disconnect before or after the explosion?*

*A. It was after.*

*Q. Do you think the driller or anybody on the rig floor had the capability to activate the EDS at that time?*

*A. I wouldn't think so because I tried—I actually tried to call up there via telephone and radio. No response. [In other words, the first explosion had seriously injured or killed the men on the rig floor.]*

Since the Horizon was still attached to the wellhead, at the time of the explosion, Jimmy Harrell was the person who could issue the order to disconnect the rig from the wellhead. When he made it to the bridge, he gave the order to EDS:

*Steve Bertone was still at his station on the bridge and he noticed Christopher Pleasant, one of the subsea engineers, standing next to the panel with the emergency disconnect switch (EDS) to the blowout preventer.*

*Bertone hollered to Pleasant: "Have you EDSed?" Pleasant replied he needed permission.*

*Bertone asked Daun Winslow [a high-level Transocean employee] was it okay and Winslow said yes.*

*Somebody on the bridge yelled, "He cannot EDS without the OIM's [offshore installation manager's] approval [that OIM, on the Horizon, was Jimmy Harrell]."*

*Harrell, still dazed, somewhat blinded and deafened, had also made it to the bridge, as had BP's [Don] Vidrine. With the rig still "latched" to the Macondo well, Harrell was in charge.*

*Bertone yelled, "Can we EDS?" and Harrell yelled back, "Yes, EDS, EDS." Pleasant opened the clear door covering the panel and pushed the button.*

*Bertone: "I need confirmation that we have EDSed."*

*Pleasant: "Yes, we've EDSed."*

*Bertone: "Chris, I need confirmation again. Have we EDSed?"*

*Pleasant: "Yes."*

*Bertone: "Chris, I have to be certain. Have we EDSed?"*

*Pleasant: "Yes." He pointed to a light in the panel. (See the PDF version of "Report to the President," at pages 29-30.)*

Although Chris Pleasant had activated the EDS system, it did not work. As Harrell told the investigators at the hearing:

*It didn't—it didn't do anything. It was like the panel was dead.*

Deepwater Horizon's massive explosion had so profoundly damaged the rig that it even disabled the Emergency Disconnect System.

When Harrell arrived at the *Damon B. Bankston*—a tidewater vessel that had been tied-up to Deepwater Horizon before the disaster and then served as a rescue ship—he helped the traumatized Horizon crew:

*Harrell remained on the main deck with the traumatized rig crew, many still half dressed, lacerated, or soaked from being in the sea. The crew filled the 260-foot Bankston's lounge, galley, and parts of the main deck, including a temporary medical area. Some lay in the bunks.*

*The Bankston crew pulled out whatever dry clothes and boots they had, and handed them to the survivors. With both life vessels and the life raft secured to the Bankston, the Deepwater Horizon leaders could try to take muster.*

*There had been 126 people on the rig when the well blew out. In the confusion, no one yet knew exact counts, but conspicuously missing were those working the drill floor. (See the PDF version of "Report to the President," at page 33.)*

The men working the drill floor were never rescued. Their bodies were never found.

## Credits:

This image—a screen shot from the joint investigation hearings conducted into the explosion of Deepwater Horizon—depicts Jimmy Harrell during his testimony. Image online via C-SPAN. Public Domain.

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<http://www.awesomestories.com/asset/AcademicAlignment/Jimmy-Harrell-Deepwater-Horizon-Explosion>

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