A MORE REVEALING BP HEARING?

The House Commerce Committee is holding the third hearing into what went wrong on the BP Deepwater Horizon rig (CSPAN is showing it on CSPAN3). As is typical for a Waxman/Stupak hearing, the Committee has done its homework, advancing the understanding of what went wrong.

Henry Waxman's opening statement reveals that the well failed a number of tests, but BP kept testing until getting a passing test, and then proceeded to close the well.

> Rigs like the Deepwater Horizon keep a daily drilling report. Transocean has given us the report for April 20, the day of the explosion. It is an incomplete log because it ends at 3:00 p.m., about seven hours before the explosion. But it confirms that three positive pressure tests were conducted in the morning to early afternoon.
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> The next bullet says: "After 16.5 hours waiting on cement, a test was performed on the wellbore below the Blowout Preventer." BP explained to us what this means. Halliburton completed cementing the well at 12:35 a.m. on April 20 and after giving the cement time to set, a negative pressure test was conducted around 5:00 p.m. This is an important test. During a negative pressure test, the fluid pressure inside the well is reduced and the well is observed to see whether any gas leaks into the well through the cement or casing.
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> According to James Dupree, the BP Senior Vice President for the Gulf of Mexico, the well did not pass this test. Mr. Dupree told Committee staff on Monday that the test result was "not satisfactory" and "inconclusive."

> Significant pressure discrepancies were recorded.
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> As a result, another negative pressure test was conducted. This is described in the fourth bullet: “During this test, 1,400 psi was observed on the drill pipe while 0 psi was observed on the kill and the choke lines.”
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> According to Mr. Dupree, this is also an unsatisfactory test result. The kill and choke lines run from the drill rig 5,000 feet to the blowout preventer at the sea floor. The drill pipe runs from the drill rig through the blowout preventer deep into the well. In the test, the pressures measured at any point from the drill rig to the blowout preventer should be the same in all three lines. But what the test showed was that pressures in the drill pipe were significantly higher. Mr. Dupree explained that the results could signal that an influx of gas was causing pressure to mount inside the wellbore.
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> Another document provided by BP to the Committee is labeled “What Could Have Happened.” It was prepared by BP on April 26, ten days before the first document. According to BP, their understanding of the cause of the spill has evolved considerably since April 26, so this document should not be considered definitive. But it also describes the two negative pressure tests and the pressure discrepancies that were recorded.
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> What happened next is murky. Mr. Dupree told the Committee staff that he believed the well blew moments after the second pressure test. But **lawyers for BP contacted the Committee yesterday and provided a different account. According to BP’s counsel, further investigation has revealed that additional pressure**

> **tests were taken, and at 8:00 p.m., company officials determined that the additional results justified ending the test and proceeding with well operations**.
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> This confusion among BP officials appears to echo confusion on the rig. Information reviewed by the Committee describes an internal debate between Transocean and BP personnel about how to proceed. [my emphasis]

And Bart Stupak's opening statement reveals that the Blowout Preventer had had some modifications that may have contributed to its failure.

> In his testimony today, Lamar McKay, the President of BP America, says that blowout preventers are "intended to … be fail-safe." But that didn't happen. The blowout preventer used by the Deepwater Horizon rig failed to stop the flow of gas and oil, the rig exploded, and an enormous oil spill is now threatening the Gulf Coast.
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> We know that the blowout preventer, the BOP, did not properly engage. The BOP has multiple rams that are supposed to slam shut to pinch off any flow around the drill pipe and stop the flow of oil from the well. There are also shear rams in the BOP that are supposed to cut and seal the pipe to prevent oil and gas from flowing. The question we will ask is why did these rams fail?
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> Our investigation is at its early stages, but already we have uncovered at least four significant problems with the blowout preventer used on the Deepwater Horizon drill rig.
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> First, **the blowout preventer apparently had a significant leak in a key hydraulic system**. This leak was found in the hydraulic system that provides

> emergency power to the shear rams, which are the devices that are supposed to cut the drill pipe and seal the well.
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> [snip]
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> Second, we learned that **the blowout preventer had been modified in unexpected ways**. One of these modifications was potentially significant. The blowout preventer has an underwater control panel. BP spent a day trying to use this control panel to activate a variable bore ram on the blowout preventer that is designed to seal tight around any pipe in the well. When they investigated why their attempts failed to activate the bore ram, they learned that the device had been modified. A useless test ram – not the variable bore ram – had been connected to the socket that was supposed to activate the variable bore ram. An entire day's worth of precious time had been spent engaging rams that closed the wrong way.
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> BP told us the modifications on the BOP were extensive. After the accident, they asked Transocean for drawings of the blowout preventer. Because of the modifications, the drawings they received didn't match the structure on the ocean floor. BP said they wasted many hours figuring this out.
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> Third, we learned that **the blowout preventer is not powerful enough to cut through joints in the drill pipe**. We found a Transocean document that I would like to put on the screen. It says: most blind shear rams are "designed to shear effectively only on the body of the drillpipe. Procedures for the use of BSR's must therefore ensure that there is no tool joint opposite the ram prior to shearing."

> [snip]
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> And fourth, we learned that **the emergency controls on the blowout preventer may have failed**. The blowout preventer has two emergency controls. One is called the emergency disconnect system or EDS. BP officials told us that that the EDS was activated on the drill rig before the rig was evacuated. But the Cameron official said they doubted the signals ever reached the blowout preventer on the seabed. Cameron officials believed the explosion on the rig destroyed the communications link to the blowout preventer before the emergency sequence could be completed.
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> In other words, the emergency controls may have failed because the explosion that caused the emergency also disabled communications to the blowout preventer. [my emphasis]

Needless to say, today's hearing should be a lot more comprehensive than yesterday's hearings.