



Investigators believe that escaping gas, from the well below the rig, may have been released (among other places) via a 6-inch Mud Gas Separator (MGS) bursting disk relief line. This image depicts a photo (Figure 7) from BP's September 8, 2010 Investigation Report. It "was one of the first taken of Deepwater Horizon during the accident and clearly shows a jet flame coming from the starboard side of the rig. The investigation team believes this was probably flow through the 6 in. MGS relief line, which supports the theory that the MGS bursting disk was subjected to pressures beyond its equipment design rating." (See <u>BP Report</u>, at pages 117, 119 and 120.)

Steve Bertone, Deepwater Horizon's chief engineer, was in bed—just starting to read the first sentence of a book—when he heard an odd noise that kept getting louder. He later told investigors what he experienced:

As it progressively got louder, it sounded like a freight train coming through my bedroom and then there was a thumping sound that consecutively got much faster and with each thump, I felt the rig actually shake. (See Chapter 1, page 9, of the National Commission's "Report to the President," also appearing as page 25 of the PDF version.)

Following a loud boom, the lights went out. Leaping out of bed, then opening the door so he had some light to help him get dressed, he heard an ominous announcement on the PA system:

Fire. Fire. Fire.

Bertone knew this was no drill. In the air he sensed the presence of fuel. Then a second explosion ripped through the rig, flinging Bertone across the room.

Quickly pulling on his clothes and grabbing a life vest, he headed out of his room to check-out what was happening. When he reached the bridge, he was stunned. Assessing the situation, by viewing the rig's dynamic positioning system—which maintained *Deepwater's* position above the Macondo Well the crew had drilled—Bertone could tell they'd experienced a blowout:

I observed that we had no engines, no thrusters, no power whatsoever. I picked up the phone which was right there and I tried calling extension 2268, which is the engine control room. There was no dial tone whatsoever...When I looked out the window [on the starboard side of the bridge], I saw fire from derrick leg to derrick leg and as high as I could see. At that point, I realized that we had just had a blowout. (Bertone, quoted in Chapter 1, page 10, of the National Commission's "Report to the President," also appearing as page 26 of the PDF version.)

By the time of these events, no one had issued a general alarm. Andrea Fleytas activated the alarm, triggering these words which could be heard throughout the vessel:

Report to emergency stations and lifeboats. This is not a drill. This is not a drill. ("Report to the President," page 26 of the PDF version.)

Immediately thereafter, Fleytas sent out a Mayday distress call.

Bradley Shivers—out on the Gulf for a day of tuna fishing with two of his buddies—was on a 31-foot boat called *Ramblin' Wreck* when he heard Andrea's words coming from his boat's radio:

Mayday, Mayday, Mayday, this is the Deepwater Horizon. We are on fire. ("Report to the President," page 26 of the PDF version.)

Almost at the same time as Shivers and his friends heard the Mayday call, they heard and felt a concussive sonic boom. A massive explosion had just ripped through *Deepwater Horizon*.

On *Deepwater's* bridge, Steve Bertone was at his station dealing with a complete power outage. The engines weren't running—they weren't even starting.

Then he saw Mike Williams, although he didn't initially realize that it was Mike since the person he was looking

at had a blood-covered face. The "Report to the President" tells us what happened next:

At that moment, the water-tight door to his [Bertone's] left banged open and he heard someone say, "The ECR [engine control room] and pump room are gone. They are all gone." Bertone turned around, "What do you mean gone?" The man speaking was so coated in blood Bertone had no idea who he was. Then he recognized the voice. It was Mike Williams.

Bertone saw how badly lacerated Williams's forehead was, grabbed a roll of toilet paper from the bathroom, pressed it on the wound to staunch the bleeding, and ordered, "Hold this here." Then he went back to his station and looked at his screen. "There was still nothing, no engines starting, no thrusters running, nothing. We were still [a] dead ship." ("Report to the President," page 26 of the PDF version.)

At that moment, the *Deepwater Horizon* was actually as alive as it would ever be again. Credits:

This image appears in <u>BP's Investigation Report, dated 8 September 2010</u>, as Figure 7. According to the report, it was one of the first photos taken after Deepwater Horizon's initial explosion on April 20, 2010.

See Alignments to State and Common Core standards for this story online at:

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