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Workers on Oil Rig Recall a Terrible Night of Blasts

By IAN URBINA and JUSTIN GILLIS

NEW ORLEANS — Nearly 50 miles offshore at the big oil rig floating on a glassy-calm sea, a helicopter landed early on the morning of April 20, carrying four executives from BP, the oil company. The men were visiting the Deepwater Horizon to help honor the crew for its standout safety record.

The rig workers were buzzing for another reason. They were nearly done with the latest job. It had been a little tricky, but it was nothing they could not handle.

As night fell, Micah Joseph Sandell, 40, was in the small cab of his crane, three stories above the bustling deck. Two floors down from the helipad, men in red coveralls waited for dinner in a hall lined with gold safety plaques. Eugene Dewayne Moss, a 37-year-old crane operator, realized he needed to tear himself away from a movie to get ready for his overnight shift.

“I thought, Oh man, I’ve got to go,” Mr. Moss recalled. “I got up, turned my TV off.”

Seconds later, a thundering explosion rocked the rig, the beginning of a terrifying night for the men who would survive one of the most harrowing disasters in the history of the oil business.

All over the ship, men snapped into action. Sleeping workers leapt from their beds. Then came a second explosion, even louder than the first. They later struggled to describe it — a tornado of fire, a nuclear bomb, a jet engine exploding. But a half-dozen rig workers interviewed this week all agreed on one thing, recalling that moment: “We all were sure we were going to die,” said Dennis Dewayne Martinez, 30, a supervisor on the rig.

The Deepwater Horizon was one of the most sophisticated drilling rigs on the planet.

Commissioned in 2001, the ship, 396 feet from stem to stern, could park in the water, lock onto satellites to measure an exact position and shoot water out of a series of thrusters to maintain that position. Even with waves crashing against the keel, the rig could steady itself for the precision work of sending drill pipes more than six miles down, dead straight, through the ocean floor and deep into the earth's crust.

Only the year before, the Horizon had set a world record by punching through 35,000 feet of water and rock — nearly seven miles — in the Gulf of Mexico, creating a well called Tiber for BP, the oil giant once known as British Petroleum.

This time, the Horizon was drilling an exploratory well about 47 miles off the Louisiana coast, in a stretch of the sea floor known as Mississippi Canyon Block 252. BP and some partners had paid the federal government $34 million for the lease, and the Horizon crew had celebrated when they found oil there.

But the Horizon was a drill ship, not a production vessel, so the workers had been told to cap the well for later use and move on to the next job.

Up on the bridge that April night, the officers were keeping close watch on the Damon B. Bankston, a 260-foot cargo ship that was pumping special drilling mud through a hose from the rig.

The job of sinking the well had gone relatively smoothly — extending the well, pipe by pipe, until it punched through to the oil below. Then the crew shoved a final long stretch of pipe deep into the reservoir.

Trouble With Gas Buildup

As the job unfolded, however, the workers did have intermittent trouble with pockets of natural gas. Highly flammable, the gas was forcing its way up the drilling pipes.

This was something BP had not foreseen as a serious problem, declaring a year earlier that gas was likely to pose only a "negligible" risk. The government warned the company that gas buildup was a real concern and that BP should "exercise caution."

At one point during the previous several weeks, so much of it came belching up to the surface that a loudspeaker announcement called for a halt to all "hot work," meaning any smoking, welding, cooking or any other use of fire. Smaller belches, or "kicks," had stalled work as the job was winding down.

By mid-April, the crew was in the mop-up stages of the operation. The day before the blast, workers from Halliburton, the oil services contractor, had finished one of the trickiest tasks in building a well: encasing it in cement, with a temporary plug of cement near the bottom of the pipe to seal the well.

The Halliburton workers used a less common technique for the cement, whipping nitrogen gas into it to create a kind of mousse. This type of cement, if used correctly, forms a tighter seal, but it is trickier to handle.

Still, all in all, it had been a pretty routine job for the Horizon.

"Almost there," said one supervisor as he left the 11 a.m. daily meeting on April 20. "We're almost done, baby!"

Some of the men had heard they might even get a bonus for finishing ahead of deadline.

Explosive Fury

It happened so fast.

Just before 10 p.m., the crew was using seawater to flush drilling mud out of the pipes. Suddenly, with explosive fury, water and mud came hurtling up the pipes and onto the deck, followed by the ominous hiss of natural gas. In seconds, it touched some spark or flame.

Three stories above the deck, the blast blew Mr. Sandell out of his seat and to the back of his cab. As he scrambled down the ladder, fire leaped up to envelop him. Another explosion sent him flying 25 feet to the ground.

"I took off running," Mr. Sandell said. "How, I can't tell you."

He joined the other men in a sprint to the two lifeboats on the rig's bow. Men were climbing over one another to get inside the covered lifeboats, which look like capsules and can hold up to 50 men each.

The assistant driller who was supposed to take muster — or roll call — panicked. Instead, he handed Mr. Martinez the clipboard before climbing into a lifeboat.

"Hurry up!" the men already in the boats screamed. "Lower the lifeboat!"

Mr. Martinez said they needed to wait for others. The men in the boats yelled that there was no more time — the 242-foot steel tower in the center of the rig was engulfed in flames. They were certain it was going to fall their way.

In one lifeboat, a worker lay on the deck, trying to stanch the blood flowing from a deep gash in his neck. Others tried to rub the insulation from their eyes, after the walls of their cabins collapsed. Still others were caked in the clay-brown mud that had shot out of the well after the first explosion.

Most of the men had on bright orange life jackets. Some men, having been thrown from their bunks, wore little else.

Not everyone could get to the boats. Through a porthole, Mr. Moss watched as some co-workers — black silhouettes against the flames — jumped from the rig. "You can't see them good enough to tell if they had life jackets on or anything," he said.

Within 10 minutes, the two lifeboats closed their doors and dropped about 100 feet down to the water below.

A small boat was nearby. Albert Andry III, a recreational fisherman, and his buddies were bobbing near the rig, trying to catch the fish that schooled near it.

When Mr. Andry — who was contacted by a reporter after he posted an account of his experience on the Internet — noticed water gushing from the center of the rig, one of his friends, who had worked on rigs, knew something was wrong.

"Go! Go! Go! Go! Goooooo!" the friend yelled. Mr. Andry opened his throttle wide, covering 100 yards or so before the rig exploded.

"The rig blew a few more explosions after that and began to burn down," he wrote later on a Web message board, where he also posted photos and videos of the scene. "Some of the rig began dripping into the water and the platform tilted in and turned RED HOT."

From their lifeboats, the Horizon crew radioed for help. The Bankston, the cargo boat that was attached to the rig when the blowout began, had managed to pull away, and now the captain was pulling survivors off the lifeboats.

Frantic emergency calls summoned planes, helicopters and Coast Guard fireboats to the stricken rig.

Radio Silence

On the Bankston, the men cried. They prayed. Nobody talked much as they watched the orange tongues of flame from the Horizon lick the sky, reflecting off the still water.

The men were kept aboard the rescue ship, in the middle of the ocean, for a full 12 hours. Worse than the wait, they said, was being forbidden to call their families. The men were told that the Coast Guard wanted to conduct interviews before the workers spoke to family or anyone else.

Rumors spread that the BP executives who had visited the rig were up on the Bankston's bridge using the ship's radio or a satellite phone to call home.

Helicopters thwocked overhead. Boats darted around the rig searching for survivors. Word soon came that 11 were missing. (Of the 126 on board at the time of the disaster, 115 survived, of whom 17 were injured.)

As he watched the hulking rig, his home for much of the past eight years, slowly tilt and falter, Mr. Martinez thought about his father's ring. The only time he ever took the ring off was when he was working. It was now headed to the bottom of the sea.

"I lost my daddy when I was 23, he was 46," he said.

Another worker, startled by a memory, jammed his hand into his pocket. He pulled out a small photograph of his son. He caught his breath, stared at it, then exhaled.

Finally, the Bankston started its 12-hour journey back to shore. It stopped on the way to pick up a couple of medics from another rig. At a second stop, it picked up Coast Guard officials, who immediately began passing out forms for the men to fill out and to describe what they saw. Some were pulled aside for interviews.

Some relief arrived: blankets, and for supper, pork chops and hot dogs.

Conversation followed, but mostly they just traded questions. What could possibly have gone so horribly wrong? If the cement job worked, how had gas leaked up the pipe and sparked? Others wondered about a device on the sea floor called a blowout preventer and why it did not seem to have activated.

Pulling in to Port Fourchon, the men fell silent again.

“To me it all felt like a nightmare,” Mr. Sandell said. “And I still wasn’t sure if I was awake.”

As he and others climbed off the Bankston, they were greeted by several Coast Guard and company officials sitting around a table stacked with forms.

Behind the table was a row of portable toilets. And as the crew members approached, each was handed a cup for a mandatory drug test. The search for an explanation would begin with them. That search continues.

Ian Urbina reported from New Orleans, and Justin Gillis from New York. Andrew Lehren contributed reporting from New York, and Clifford Krauss from Houma, La. Toby Lyles contributed research.