

## Cut off: At center of crisis, city officials faced struggle to keep in touch

by Christopher Rhoads -- Wall Street Journal 09/09/2005

NEW ORLEANS -- For days after Hurricane Katrina's devastating rampage through this city, a small corps of city leaders holed up at the Hyatt Hotel. They had virtually no way to communicate with the outside world.

A command center set up before the storm stopped working when the backup generator ran out of diesel fuel. Cellphone towers had been knocked out by high winds. Many land lines in the area were unusable.

When emergency power finally returned to the Hyatt, Scott Domke, a member of the city's technology team, remembered that he had recently set up an Internet phone account with Vonage Holdings Corp. He was able to find a working socket in a conference room and linked his laptop to an Internet connection.

At 12:27 a.m. on Wednesday, Aug. 31, the mayor's inner circle made its first outside call in two days. Eventually, the team was able to get eight lines running from the single Vonage account. That evening, the phone rang and it was President Bush calling from Air Force One.

During the first days of Katrina, the besieged mayor's office struggled to stay connected. It was forced to rely on ingenuity and extreme methods, including breaking in to an Office Depot -- as the chief of police stood watch and chased away unofficial looters -- to obtain necessary equipment. The Hyatt group would eventually be forced to move to a higher floor as a gang intent on breaking into its stockpile of food assaulted the hotel.

The tragedy has revealed many ways that the city was unprepared for the storm, flood and chaos that followed, and its communications system was no exception. Greg Meffert, the city's chief technology officer, says that the New Orleans emergency communication plan relied heavily on basic phone service remaining intact. Cellphone backups also failed, and the few older model satellite phones lost battery power and couldn't be recharged. But under duress, Mr. Meffert and his three-member team also found creative ways to cope with the disaster.

Hurricane conditions first hit the city on Saturday, Aug. 27. Mr. Meffert -- whose hats include deputy mayor, the mayor's right-hand man and CTO -- and several of his team and their families had decided the Hyatt, which is a couple of blocks from City Hall, was the best place to hunker down and establish communications for the storm. The hotel was better served with power and food than the city command post. With the mayor and some other officials, including the chief of police, they moved into some conference rooms on the fourth floor and figured they'd be in the hotel for a couple of nights at the most.

Over the next two days, what remained of the city government that had not evacuated before the storm -- a core group of about 15 people -- steadily descended into information darkness.

By the time the eye of Katrina made landfall that Monday morning, the group had already suffered more than 24 hours of hurricane-force winds, including a tornado that ripped off part of one side of the hotel.

"When the tornado rolled over us, you could hear a weird rumbling sound," recalled the 40-year-old Mr. Meffert this week, sitting unshaven behind his desk in City Hall in khaki shorts, a black T-shirt and white tennis sneakers. Army Rangers and other troops ran through the still submerged streets below his window. "You could hear the windows popping out like gunshots," he said.

Mr. Meffert says phone service went out at the Hyatt because of power failures and water damage to the hotel's main switch. After that, the Hyatt team's only available means of communication were police radios. But those were operating at a fraction of capacity because the generator serving the main transmission site broke down. Sometimes dozens of officers were trying to use one channel.

For the most part, city officials relied on "human chains of communication," he says. "It was like: 'Go tell so-and-so if you see them.' "

The team slept on floors and tables in the sweaty conference rooms. Then they figured the worst was over and that communications -- and normality -- would soon return.

Instead, the opposite happened.

On Tuesday, the levee at the 17th Street Canal broke, and water poured into the city, raising the water level by a foot or more every 20 minutes, Mr. Meffert estimates. Within hours, nearby streets were submerged in more than 12 feet of water. Water quickly engulfed the Hyatt and surrounding government buildings. Mr. Meffert and his team spent most of this day helping with rescue efforts, mostly from boats. "We were just pulling [people] from the water," he says.

Mr. Meffert evacuated his wife and two young boys to his parents' home in San Antonio. The evacuation party included the pregnant wife of the chief of police.

That evening Mr. Meffert realized things would get worse unless communications were restored, immediately.

That's when Mr. Domke had his brainstorm. For the next five days, virtually all communications out of New Orleans by the city's top officials depended on Mr. Domke's laptop and this single Internet phone account.

Mr. Meffert, a software entrepreneur before he joined the mayor's office in 2002, realized he needed more lines and more phones to cope with a rapidly deteriorating situation. Before dawn on Wednesday, Messrs. Meffert and Domke and some other aides drove a military Humvee into the darkness and devastation. They were accompanied by the chief of police, Eddie Compass.

Their destination was Office Depot, where they loaded up on phones, routers, printers and fax machines -- anything that was needed to support a government under siege by weather and crime. The store had already been looted of some supplies. While Mr. Meffert was looking for printer cartridges, several looters returned. Mr. Compass, the police chief, roared at the looters and chased them off, says Mr. Meffert.

Mr. Meffert told the chief he needed a large computer server for email. They found the one used by Office Depot in its backroom.

"Do you really need this?" Mr. Meffert says the police chief asked him.

"Yes, we do," Mr. Meffert says he replied.

The server was screwed into an equipment rack in the backroom. Without the use of tools, the chief bent parts of the metal rack and ripped the server out of its housing with his hands, Mr. Meffert says, adding: "I have never seen that before."

The team was sleeping and working out of a single conference room, called Burgundy D. There were enough cots for five people. Another half-dozen slept on the floor. In one corner, phones, routers, cables and other gear lay in a pile. Dirty blankets and clothes were scattered about.

On Wednesday evening, when Mr. Meffert was manning the phones, one rang. On the other end was President Bush in Air Force One. Mr. Meffert, now wearing the hat of secretary, scribbled down the number and sent someone to find Mayor Ray Nagin.

The mayor later recounted his conversation with the president in an interview with WWL-AM on Thursday. "I told him we had an incredible crisis here and that his flying over in Air Force One does not do it justice," the mayor said.

Later in the interview, conducted over the single Hyatt link, the mayor blasted the response to date. "I need reinforcements, I need troops, man. I need 500 buses, man," he said.

On Thursday morning, Mr. Meffert's team got word that 200 gang members were moving on the Hyatt, apparently aware that it still had food, drink and power. To signify that they were in the gang, members had made a distinguishing rip in their shirts, says Mr. Meffert. An elevated walkway from the Superdome connects to a shopping arcade, which in turn connects to the Hyatt.

Around 10 o'clock that morning, the team evacuated its fourth-floor command post for the 27th floor. The only equipment it brought along was a handful of cordless phones, which had a range of 300 feet. On the 27th floor, where the mayor was staying, the phones worked only if the user hung over the balcony toward the atrium inside the building.

"This was when the last parts of the government were about to come undone," says Mr. Meffert. "It felt like the Alamo -- we were surrounded and had only short bursts of communication."

With Police Chief Compass and other officers blocking the entrance, looters were not able to enter the Hyatt, Mr. Meffert says.

At the same time, water continued to rise around the building. Mr. Domke and Jimmy Goodson, an aide in charge of security for the team, realized that the electronics for the hotel -- upon which the single communication link depended -- were on the ground floor, perilously close to the rising water. They dispatched members of their group to throw sandbags around the electronics room. The water reached within three inches of the room but never damaged the electronics, Mr. Meffert says.

New Orleans had an emergency communications plan, but it had serious flaws. The back-up communications of the city's Office of Emergency Preparedness consisted of a few older model satellite phones, but their batteries went dead and couldn't be recharged, Mr. Meffert says.

In the early stages of the storm, the city's emergency command office, on the ninth floor of city hall, got power from an emergency diesel generator. But by the time the hurricane passed, it had burned up about one third of its fuel. Fuel soon ran out completely and couldn't be replenished.

Meantime, the commercial phone systems that the city relied on blinked out during the storm and its immediate aftermath, according to Mr. Meffert. Land lines went dead in part because of switch and power failures, and city-issued cellphones stopped working after towers were blown down, he says. BellSouth Corp. says that its nearby telecom hub was operative throughout the crisis.

Mr. Meffert says the satellite phones were used in the early stages, but their batteries soon were drained. He tried to recharge one phone, but it wouldn't keep the charge, he says. "It kept flashing 'low bat,' " he recalls.

Mr. Meffert says that the city was unable to spend more on emergency communications because of a budget crisis and cuts in federal aid. But he doubts that additional money would have helped much. "Virtually no city could have ever prepared for something of this magnitude," he says.

When Mr. Meffert arrived at the mayor's office in 2002, budgets were calculated on cheap calculators, he says. Out of 70 major cities in the U.S., the New Orleans municipal Web site was ranked dead last that year in a quality survey.

This past year, Mr. Meffert's team constructed an innovative surveillance bubble over the city consisting of cameras, wireless Internet and software in an attempt to lower the city's record murder rate. Though controversial with civil-rights groups, the system has nearly halved crime in the 20% of the city where it operates, says Mr. Meffert. He distributed BlackBerrys among senior ranks in the government, devices that proved invaluable in this crisis once email resumed working late last week.

In the middle of the chaos several days ago, Mr. Meffert was notified that the city's Web site now ranks No. 1 of those 70 major U.S. cities. The site stayed up throughout the storm because Mr. Domke was able to shift it to a Dallas server.

Toward the end of last week, the "cavalry" began arriving, says Mr. Meffert, in the form of several thousand walkie-talkie phones provided by Sprint Nextel Corp. The phones operate directly between users within short distances, so they do not require cell towers to transmit.

At the same time, a team from computer supplier Unisys Corp. arrived, led by an ex-Army Ranger named Ed Minyard. In addition to providing equipment to begin constructing a wireless network in the Hyatt and City Hall, Mr. Minyard brought some other supplies: bottles of Wild Turkey whiskey.

"We had the necessary provisions," says Mr. Minyard. "These boys needed it."