



flaming arrow. Verbal expletives filled the lab as we all watched in disbelief. I immediately grabbed a camcorder and went outside to our multilevel parking garage here in Secaucus, NJ. The halls were filled with people, some visibly upset others' speechless. Once outside the New York skyline was clearly visible against the bright blue morning sky. I could see the smoke billowing from the twin towers, resembling two smoldering candles.



Photo by Mike Coppolla M.F.R.

The surrealistic mood dwarfed the disbelief and sorrow that dominated the crowd. Could it be that the jewel of the New York skyline was disappearing before our eyes? Most believed that however severe the damage, WTC's "Twin Towers" were unsinkable and would endure any physical abuse they sustained. It was now about 9:45 a.m. and I decided to go back inside. As I entered the lab the disbelief increased as CNN announced that another plane crashed into the Pentagon in Washington, D.C. At 9:51 a.m. came another bulletin that the F.A.A. grounded all air traffic in the U.S. We all wondered if this was the beginning of the end or the end of the beginning. At 10:00 a.m. WTC's "unsinkable" reputation became the unthinkable as the North tower slowly crumbled before my eyes. Twenty nine minutes later the South tower seemed to implode on itself and New York's World Trade Center was no longer.

In the hours that followed I had every radio I owned scanning different services. The preparedness I had mentioned in past articles finally paid off as most radios were already programmed. Search mode was next to useless as virtually every frequency was

being used. One exception was the aircraft band where all commercial traffic was grounded earlier on Tuesday.

Sitting by an open window the distinct sound of military aircraft captured my attention. It was both exciting and alarming for I knew it wasn't a drill! Via our E mail list I didn't take long to ID the active military channels... 125.125, 271.0.. And on and on. The AWACS traffic commanded attention with their fully modulated studio quality audio. Truly a flying command center.

To keep the group informed I decided to create a web page listing all the active frequencies. It's still on line at <http://nydxa.4t.com/WTC.html> Word spread quickly as the page received almost 3000 visitors during the first five days. Along with numerous frequency activity reports came numerous supportive E mails from scanner groups throughout the world. I was really amazed!

I could easily fill 10 pages with listings of active frequencies, though I see no purpose since much of the urgency has subsided and many frequencies are no longer in use. Certain agencies who are in it for the long haul will be mentioned.

### **SPACE IMAGING**

<http://www.spaceimaging.com/level1/index32.htm>  
If you've ever wondered just how good those new spy satellites can "see" I suggest you check this page out! The images, in full color, appear to be shot from an aircraft perhaps 2000 - 3000 feet above WTC. In reality, these were taken by Ikonis, a commercial satellite orbiting at an altitude in excess of 400 miles! The BBC reported that it was commissioned by the U.S. Government for anticipated military action in Afghanistan.

### **MOTOROLA RESPONDS TO WTC DISASTER**

"Motorola Emergency and Customer Response

As recovery efforts continue in the wake of this national tragedy, Motorola is continuing extensive around-the-clock efforts to globally expedite new shipments and meet numerous customer requests for emergency help to support police, fire, ambulance and other emergency services in the affected areas.

Motorola business and logistic teams and manufacturing facilities worldwide will remain on full alert and will continue to give priority to public safety emergency orders as needed.

To date, Motorola has delivered at least 36 truckloads of communications equipment to field teams and customers in the New York City area, Virginia and Maryland. Two planes carried Motorola equipment into the affected areas on Friday, September 14, 2001, and another two planes are scheduled for future deliveries.

Three major communications systems have already been delivered, including a 900 MHz "trailer" radio system and an 800 MHz "trailer" radio system in New York City, and an 800 MHz "trailer" system that is being used at the plane crash site in Pennsylvania. These systems are similar to those used in the past for major sporting events. A fourth major system, an 800 MHz, 15-channel communications system, is now enroute to New York to provide back-up communications for emergency services. Motorola workers produced the system, which typically takes about three weeks to assemble, in 30 hours for shipment to the emergency areas.

More than 5,800 portable radios, over 13,000 batteries and about 2,500 chargers have been delivered so far. Additionally, Motorola has delivered 700 Iridium satellite telephones to emergency agencies in the New York City area.

Earlier this week, Motorola provided 1,000 cellular phones to a major insurance company for its policyholders in the affected areas.

Motorola has also donated 10,000 iDEN multi-function phones to various federal, state and local government agencies, plus about 88,000 batteries, chargers and other accessories. Nextel will provide the phone service."

#### **WHERE HAVE ALL OUR TV STATIONS GONE?**

<http://world.std.com/~fybush/neww.html>

By Scott Fybush

Almost a week after the attacks on the World Trade Center, New York's TV dial continues to return to something resembling normalcy.

The 360-foot television mast atop One World Trade Center supported 10 main television antennas, numerous auxiliary antennas and a master FM antenna. Transmissions from the mast began in June, 1980. Ten television stations in the metropolitan area, including all the major networks, broadcast from the mast. In addition, six stations broadcast high-definition, digital television from the World Trade Center.



Armstrong Tower in Alpine NJ

WABC-TV (Channel 7) returned to the air with a low-power signal from the Armstrong tower in Alpine, N.J. on Saturday afternoon, with WNET (Channel 13) restoring its signal Sunday evening from the Empire State Building, again at low power.

That leaves WWOR (Channel 9) as the last VHF signal to return. It plans to join sister Fox outlet WNYW (Channel 5) from Empire sometime this week. Pax's WPXN (Channel 31) is being seen over several LPTVs, including W23BA (Channel 34) in East Orange, N.J. and WPXU-LP (Channel 38) in Amityville, L.I.; there's no word on when WPXN itself will get a signal back on the air.

On the FM side, WNYC-FM (93.9) was the last of the World Trade Center FMs to restore a signal on its own frequency; it returned from Empire at 3:00 Sunday afternoon. The next project for all the affected stations is to turn these low-power emergency installations into full-power transmission facilities that can be used for the long haul. Despite all the talk of rebuilding the Trade Center towers, any reconstruction would be years in coming, and that means the Empire State Building and the Alpine tower are likely to remain the area's primary TV sites for a while.

With that in mind, here's another run-through of the stations affected:

**WCBS-TV (2)** - Continuing operations from its full-power backup site at Empire.

**WNBC (4)** - On the air from Alpine at low power.



**WNYW-TV (5)** - On the air from Empire at low power.

**WABC-TV (7)** - On the air from Alpine at low power.

**WWOR-TV (9)** - Soon to resume operations from Empire.

**WPIX-TV (11)** - Temporary low-power operation from Daily News building, 220 E. 42nd Street; moving to Empire.

**WNET (13)** - On the air from Empire at low power.

**WPXN-TV (31)** - Not yet on the air.

**WNJU (47)** - On the air from an undetermined backup site.

**WKCR (89.9)** - On the air from a Columbia University dorm building at low power.

**WPAT-FM (93.1)** - On the air from Empire.

**WNYC-FM (93.9)** - On the air from Empire.

**WKTU (103.5)** - On the air from auxiliary site at Four Times Square at full power.

And of course, we can't forget that six transmitter engineers remain among the nearly 5,000 missing and feared dead at the World Trade Center. They are:

**Isaias Rivera**, a 20-year veteran of WCBS-TV

**Bob Pattison** of WCBS-TV, formerly of Boston's WHDH-TV

**William V. Steckman**, WA2ACW, of WNBC

**Donald DiFranco** of WABC-TV

**Steven A. Jacobson**, N2SJ, 53, of WPIX-TV

**Rod Coppola**, KA2KET, of WNET

We're told Jacobson contacted WPIX master control after the first plane hit the south tower, to report he was putting on his oxygen mask. A few minutes later, he called to say the smoke and flames were overwhelming on the 110th floor, and WPIX was unable to reach him again after that.

*Editors Note: Additional info suggesting that WNBC will also move to the Armstrong tower can be found at this link.*

<http://www.nypost.com/seven/09172001/entertainment/4232.htm>

### **VLF TEST TRANSMITTER BUILT FOR NYC SEARCH**

By Chriss Scherer, editor

Quincy, IL, and - Sep 17, 2001 - Like many office buildings, the employees in the World Trade Center were issued security cards to permit access into

various parts of the building. These access cards, sometimes called Smart Cards, transmit a data burst when excited by a specific radio frequency. With this in mind, technicians at Motorola began developing a system that may be useful in locating people in the rubble of what was once the World Trade Center. Greg Buckwald of Motorola worked with Broadcast Electronics in the early development of the AM C-QAM system. Because of his existing relationship with Broadcast Electronics, he called on the company to work on developing the location system. A Broadcast Electronics AM500A was modified to transmit at 125kHz.

Smart Cards are made to respond to the 125kHz signal by responding with a data burst on 187.5kHz. The system will be used to send a signal through as much as 10 feet of rubble while a listening system monitors for the resulting data bursts, indicating the presence of a card and, hopefully, a person.

The modified transmitter was built in Quincy. Jerry Westberg and Jay Linderer of Broadcast Electronics drove it to Motorola in Schaumburg, IL near Chicago on September 14, where it was tested. The unit was shipped to New York City on September 17, where it was demonstrated to the New York Port Authority. Pending the results of the test, the unit will be put into use later on September 17.

The transmitter power output is set at 350W, which should penetrate up to 10 feet of rubble. The transmit antenna is a loop about three feet in diameter. The power level being used is to accommodate the antenna, which measures about 3 ohms +j300 - hardly an ideal match, but good enough to send the carrier signal. The transmitter runs on 220 volts and will be powered by a generator on site.

If the tests go well, Motorola and Broadcast Electronics may build a second unit for use at the Pentagon.

### **MILIRARY HELO FREQUENCIES**

Below is a list of the most active Military Army helicopter frequencies. These are used currently on a nationwide basis.

30.3000	30.5000	32.3000	32.4500	32.7000
32.8500	32.9000	34.1500	34.6500	34.7500
35.2000	36.1000	38.4000	40.9000	
41.5000		Army Helicopter Towers		
23.0250		Helicopter Air-to-air		
123.050		Helicopter Unicomm		

123.075	Unicom-Heliports
123.750	Air-to-air
126.200	Military Airports
134.100	Military Airports - GCA Radar
241.000	Army/National Guard
243.40	Military Emergency Guard
244.200	Helicopter Tactical
245.500	Army Tactical

### **RADIOS ONLINE**

<http://www.flash.net/~av8tor/radios/>

An interesting potpourri of scanner / SWL and general radio news.

### **WB6NYC MAKES THE NATIONAL NEWS**

Those of you in NYC may have caught the 6 p.m. news this Wednesday (10/03) when the media first aired recordings of NYPD and FDNY communications while the towers were collapsing. It was first reported that an amateur radio operator from CA recorded these. That must have been one hell of a band opening! A few minutes later on NBC's network news they clarified the story by explaining the transmissions were recorded over the Internet by a CA ham, Bob Sanford - WB6NYC. While the name may not be familiar to you, WB6NYC was a frequent check in to our weekly net when he lived in NYC as N2OWI. Bob still receives the newsletter and contributes to the newsletter via E mail. I asked Bob how the media approached him and here's his response. *"Well I had NO IDEA this was going to take on a life of its own. There was just suppose to be this article in Newsday but when it was sent to the Associated Press Wire Service, ALL HELL BROKE LOOSE!!!! A friend in New York sent the audio that day to me from his scanner. The good thing about getting it direct from him was it was not susceptible to any dropouts or connectivity issues as there are on the normal sites. Im also sure that the regular feeds on the net crashed"*

The recordings the media used are available on the net at Bob's web site at

<http://bayscan1.50megs.com/>

Recordings from the Pentagon incident in Washington DC are also available at

<http://briefcase.yahoo.com/bc/trunkedsystem>

### **LISTENER FEEDBACK**

Following the media coverage Charlie N2NOV forwarded me an E mail from an obviously concerned listener who happens to be the assistant EC in Brooklyn. Mike goes on to say, .. *"THERE SHOULDN'T BE ANY TYPE OF 'NET' ON THE AIRWAVES THAT WILL ALLOW A PERSON TO*

*GLEAN INFORMATION REGARDING PUBLIC SAFETY! In this day and age anyone conducting such a 'NET' should be held liable to prosecution for 'AIDING and ABETING' criminal / terrorist enterprises! I'M DAMN SERIOUS ABOUT THIS! Mike Lunetta W2MPL"*

I dropped Mike an E mail and received this response.. *"Thanks for your reply Bob, I see I've stirred up a hornets nest. I'll be honest with you, I listened to the SCANNER NET for the first time while waiting to be "secured" from a "net" after the NYC OEM antenna was brought back on line. There was an item that I took exception to, someone mentioned the fact that a certain frequency or bank of frequencies (I can't remember the exact wording at this late date) was used for "surveillance." That information should not have been passed over the air! I should have said something earlier but I held my tongue. Shame on me! In light of the recent events at the WTC, the Pentagon, and in Pennsylvania I firmly believe that certain information should remain "off limits"— as Amateur Radio operators we should know better. If this information must be passed then a secure mode (email?) should be used. Certain forms of censorship are a necessary evil. Perhaps you agree? Is it paranoia? I think not, I'd rather think of it as exercising caution. I have both friends and family in law enforcement and I'd prefer it if the "bad guys" didn't get the drop on any of them! Regarding Bob Sanford, I don't feel he did anything wrong by releasing tapes of this horrific event. In fact he probably did the world a service by helping show the magnitude of this event as measured by the extreme urgency in the voices of the NYPD personal manning the radios. It was an unintentional error on my part if you were lead to believe otherwise. Thank you and 73, Mike Lunetta W2MPL"*

So, what do you think? Should certain issues be censored or do you believe that frequency info which is published elsewhere is open for public discussion?

### **CLOSING COMMENTS**

For those of you who never visited the observation deck atop WTC visit this link which offers a very unique interactive view.

[http://www.skyscrapers.com/public/wtcterror/3d/2/pa no\\_500.html](http://www.skyscrapers.com/public/wtcterror/3d/2/pa no_500.html)

***The Urban DX'er would like to thank all those who contributed to this months issue!***

Charlie - N2NOV, "R" from Bridgeport, CT, K2DBK, MattDelaney, Mike Pollock, Pete Monaco Scott Fybush