# SCANNERS

# The Urban DX'er

### SHORTWAVE

Vol. 1 No. 8 July 25, 1997

#### **OPENING COMMENTS**

Gee, this month I really don't know where to start. It was one of the most eventful months, packed with loads of good listening and lots of new information on the Trunk Tracker. It was also one of my busiest!

If you received my e mail and checked in for our July 2 net than you would have to agree that it was one of the best nets to date. Charlie, N2NOV was able to arrange for our first guest speaker, Detective Stewart Goldstein. "Stu" is with the NYC Department of Emergency Management and is responsible for much of the NY DOITT trunked system that has become the hot topic among Trunk Tracker owners. After a brief introduction and discussion of his responsibilities Stu agreed to answer our questions on the NYPD and DOITT system. For those of you who haven't attached faces to voices, here's a glimpse of the scene as it happened - that's Charlie, N2NOV on the left and Detective Goldstein on the right!

We also announced that the net now has the beginnings of its own WEB page. Actually, it will be a few additions to my own WEB page that I decided to start creating a few weeks ago. The updating is slow and tedious so be patient. Basically, it now offers some very informative links on the AR8000, an interactive database on railroad scanning frequencies,

The Urban DX'er

The Urban DX'er is published monthly through the cooperative efforts of Bob Kozlarek, WA2SQQ and Charlie Hargrove, N2NOV

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Contributions of information for future issues is always welcomed and greatly appreciated. Please send your E mail to wa2sqq@hili.com..

the NYDXA history page and an on line version of the Bergen County portion of Scanner Master. I'd like to publicly thank Warren Silverman, N2RAH for donating the necessary information in electronic form - boy did that ever save me some typing! Check out the site at

### http://www.hili.com/~wa 2sqq

COMMENTS re: 7/02 NET

DE: N2NIG

Dear Charlie and Stewart: I was listening to the Wednesday night Scanner Established 1984



N2NOV & Detective Goldstein

net last week and I just want to say how "great" it was. Lots of great information. For a while there, I forgot I was listening to ham radio--it sounded like a professionally run talk show.

**Stewart**: you have a great voice for radio. Get your ham ticket, you will make a lot of good friends in no time at all. Looking forward to more scanner nets. Sincerely,

Mark R (N2NIG)

e-mail: mark.rothberg@nbc.com

#### NJSP UPDATE

Joe Cardani sent this info along regarding some recent changes NJSP made on their trunking system. The New Jersey State Police Marine Police on Troop A (south) are now using a separate subfleet for the western part of the state. This area, which covers the Delaware River and Delaware Bay, now utilizes channel A1-10 (formerly Air/Aviation). Stations dispatching the marine police vessels are Burlington and Bivale.

The original A1-06 Marine Police subfleet is now used in the eastern part on southern NJ (on the Atlantic Ocean and intercostal waterway). Stations on this channel include Atlantic City, Ocean, and North Wildwood.

**A1-06** shows as group 000-6 on the Uniden Trunk Tracker (size S-13)

**A1-10** shows as group 000-10 on the Uniden Trunk Tracker (size S-13)

I am not sure where Air/Aviation moved (which used to be on A1-10), but I suspect it may have switched to a Type II talk group. Joe Cardani

NEW RADIOS FROM ALINCO & ICOM?

I saw this radio while I was at Spring Comdex. The Spring CES show was also in full swing so I stopped by. Unless I missed something, there wasn't much but radio and cellular equipment there.

Model: IC-PCR1000

Type: Computer Controlled (external box)
Channels: Unlimited (1000 / file on computer)

Speed: 20 Channels per second

Freq Range: 0.01Mhz to 1300Mhz (cellular snipped)

Modes: WFM, FM, AM, SSB, CW

IF Freqs: 1st - 266.7Mhz, 2nd - 10.7Mhz, 3rd -

450Khz (except WFM)

Receive Sys: Triple Superheterodyne

Power Regs: 13.8VDC

Features:

3 Selectable screens:

1. Radio Screen, 2. Component Style Screen, 3. Communications Receiver Screen

IF Shift, Voice Scan Control Function, S-Meter Squelch, Large selection of tuning steps, Noise Blanker, Variety of Scans, Tone Squelch, RF Attenuation, AGC Function (for SSB, CW and AM modes), External speaker level control, Real Time band scope.

I was pretty impressed with the display unit. Seem much more solid then the WinRadio. The gentleman I spoke to said somewhere around \$500 (didn't say MSRP or Street). I did like the fact that the unit was external. No where near the interference that the internal WinRadio could possibly be subject to. The unit is very small so it doesn't require a lot of desk space.

If you're interested in specifics such as sensitivity, Email me directly and I'll give you what I can off of the spec sheet.

Duane

Lane County Scanner Guide http://www.clipper.net/~scanrite

#### **ALINCO**

While Icom may not get the scanning thing down yet, Alinco sure has! I stopped by the Alinco factory in Torrance, CA just a few days ago to pick up a DJ-G1t ham radio (new ham -taking test this Sat.) since it is not available at a local store. While there, I asked to see the new Alinco DJ-X10 (since I was one of the few not at Dayton:-) and I must say that I was impressed with this scanner. The main reason is that this scanner is in a case that is very tough (same as the DJ-G5) and hence durable, unlike my AOR 8000 which with one drop would send it to it's grave! Also the smaller size (much thinner) and the HT appearance make it less invasive and conspicuous. It seems to basically have all the same features as my 8000. Also, the computer port is on top of the radio next to the speaker (external) input and is a stereo plug of some sorts. Basically from what I understand, the Alinco DJ-G5 has a speaker input as well as a mike, and the mike input is now the comp. port on the DJ-X10. Much better that my FFC cable on my 8000. 1200 memories, etc.etc. Release date is around late summer, since the unit is still pending approval from the FCC. Price: around \$450-500

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OUR LISTENERS REPORT....

#### De Bill Donnelley:

NEW JERSEY RAIL FREQUENCIES http://www.pipeline.com/~k\_gnome/freq.html

#### De Eddie Muro

#### TRUNK TRACKER CASE

I bought an excellent heavy-duty leather case from Scanner World for about \$30.00 for by BX230XLT. Since the TT uses the same housing as the 230, you should have no problems with fit. I believe that they can be reached on the web at:

# http://www.scannerworld.com

also....

I was just listening to Valley Stream Fire (FireCom) on 46.100 tone out an EMS call for a Shock victim. One of the chiefs radioed in and asked what kind of victim. The dispatcher said " a shock victim" then the chief says "Yeah, but what kind of shock". The dispatcher then says... "well, he shocked himself with a defibrillator and wants to get checked out!"

#### WINTONE 2.0

Some issues back I mentioned a neat program I found that decoded Touch Tones on your computer using your sound card. The concept has caught on and the product continues to grow! WinTone can

decode tones via your systems sound card. Just plug your scanner or radio into the microphone or line-in jack on your sound card, and you are ready to go. Over 7 different tone sets are supported, including DTMF, CCIR, ZVEI and CTCSS. WinTone also functions as a "Scanner Monitor" that records activity to a WAV file, but only when squelch is broken. Features Real-Time Tone Decoding

- > WinTone decodes tones on-the-fly, making it a very useful tool!
- > Modular Design-Ton sets are modular and can be added at any time by simply obtaining a new Tone Module and placing it into the WinTone directory. So if a new and popular tone format emerges, you can add it with ease!
- > Single and Dual Tone Detection Wintone currently supports DTMF, CCIR-1, CCIR-2, ZVEI1, ZVEI-2, ZVEI-3, EIA, EEA, NATEL and CTCSS (For Tone Squelch)
- > Multiple Sample Rates Support WinTone supports 8000, 11025 and 22050 sampling rates on both WAV record/playback and real-time sampling.
- > Record to and playback from WAV files You can not only save audio, but also decode tones which are present in WAV files.
- > Triggers -This option allows you to define an event which is triggered by a certain set of tones. For example, you could launch a program when you decode the tones "123" Imagine the remote control possibilities!
- > Macros This allows you to place "a name to a number" in the decoding grid. For example, you could define "Dispatch" for "12345" and "Dispatch" would appear in the decoding grid whenever "12345" was detected. Great for CCIR or DTMF Paging systems.
- >Tone Squelch WinTone supports CTCSS for tone squelch. You can both detect which tone is active on any given transmission, and tell WinTone to only monitor or decode when a given tone (or tones) is active.
- >Performance greatly improved over previous versions! Wintone now uses processor optimized routines, configurable for 486, Pentium, MMX or Pentium Pros. This plus adjustable sampling rates makes working on a 486/66 a real possibility!

Best of all, WinTone is Shareware! - Try it out - If you find that it is worth it, there is a \$15 registration fee

(\$20 if paid via Credit Card). Your support is appreciated!

#### WINTONE PRO

Why a PRO version? What could we possibly add next? Accountability.....

The "PRO" version of wintone will have full database logging capabilities - That means that all your WAV files, detected tones, Triggers and Macros will all be logged in database format for easy access - Again you say "So what?"

Ok, say you leave the program monitoring all night. The next morning you read in the paper that there was a 3,112 car pileup just down the street at 3:03am last night. You could then go to WinTone, and call up all activity which occurred between 3:00 and 4:00 (Or whatever time you needed). You could then hear the WAV files and see the tones decoded - With no more than a button push.

You say "That's nice but what else?" - It also logs things like duration, PL tones, and frequency (where available). So you can monitor for a few hours, then call up a list of all transmissions which had a PL tone of 88.5, and see what tones were decoded then, or just listen to the WAV files.

Look for this up and coming!

CE-232 Controller Software - Codename "Buzzkit"

Do you own a CE-232 from Comtronics Engineering?

If so - Here is the stuff you have been waiting for!

Scanner control software! BuzzKit merges WinTone

PRO and everything you would expect from a scanner control package into one! For more details - E-mail me at

#### newstuff@steaksandwich.com

# MAYBE NOT SCANNER RELATED - NEVERTHELESS INTERESTING!

While watching a replay of the Mike Tyson - Evander Holyfield fight I clearly saw Mike Tyson taking several swings at a Las Vagas cop. Then the next day the media also mentioned it. I happened to find the e-mail address for the Vegas PD and I wrote them suggesting they charge Tyson for swinging at the cop... after all he is a convicted felon out on parole, what type of example does this set for the youth of our nation? Anyway, here is the reply I got from the Vegas PD. It's too bad that people with money can get away with breaking the law.

Subject: Mike Tyson -Reply

Date: Mon, 07 Jul 1997 13:16 -0800 (PST)

From: P3991R@lvmpd.com To: edmuro@sprintmail.com

Thanks for you input and I can certainly understand your frustration with Mr. Tyson. We are EXTREMELY proud of our officers actions on fight night and the restraint which they showed. A riot could have easily occurred if not for their prompt yet restrained actions.

We empower each of our officers to make decisions based on their discretion and the specifics of each incident. This officer has decided to not charge Mr. Tyson and we respect his decision and will not second guess one of our officers in the line of fire.

Phil Roland Las Vegas Metropolitan Police Dept.

#### BERGEN RECORD ARTICLE

No doubt that some of you thought the article would never make it to print. Guess what, I had my doubts also! I received a call from N2RVM on the morning of July 4 - it finally made it! The on line version that many of you saw on www.bergen.com was much abbreviated and did not contain the picture of me in my shack. Here the article word for word. You can also see it on line at http://www.hili.com/~wa2sqq and select the link "Scanner Article."

#### Listening In

# For law and order buffs, scanners are the ultimate sop show

By Monique El-Faizy Staff Writer

Joe Calafiore likes to keep an ear tuned to what's happening around him. Literally. The Totowa resident enjoys watching television as much as possible, but while he sits in front of his tube, his mind is on other things: He's listening to his police and fire scanner through an ear piece.

The reason? "I don't know why...nosy, OK?

Calafiore is one of 10 million to 20 million people nationally who listen to scanners for recreation, said Bob Grove, publisher of North Carolina based Monitoring Times, a magazine for scanner and shortwave enthusiasts.

David Eisenberg, manager of one of the areas biggest scanner suppliers, Community Communications in Fairlawn, said that he has "literally thousands" of customers.

When Fairlawn High School was evacuated in April after a potentially dangerous chemical was found in the basement, Principal Elizabeth Panella said she received several phone calls from residents who heard about the incident on their scanners.

To the untrained ear, the talk sounds more like idle chatter than a source of excitement. Most of it is police radioing fairly mundane information to each other, and to the initiated, even the potentially thrilling is indecipherable. But enthusiasts say that even seemingly banal talk is informative.

It's all about curious, said Warren Silverman, author of the bible for local scanner users, The Scanner Master New York Metro / Northern New Jersey Guide", now in its 10th printing. "Basically, why most people buy scanners is, they see a fire truck go down the street and they want to know where it's going and what's going on, "Silverman said."

Fans say scanner listening is a lot like watching a real-life cops show on television, only more real. "I've always loved to listen to police," Calafiore said. "I knew all the cops in Paterson." Calafiore said he has the scanner on whenever he's at home and has one he listens to in the car. Scanner use is legal in New Jersey, even in the car, said John Hagerty, spokesman for the state police.



WA2SQQ AT THE CONTROLS!

Calafiore's scanner collection is downright low-tech in comparison with those of some of the more technologically advanced. Bob Kozlarek has a collection of scanners scattered throughout his Elmwood Park house in a dedicated room in the basement, hidden behind the laundry room. In addition to scanning the airwaves, Kozlarek likes to surf the Internet and is employed as an engineer for a major broadcast electronics company.

Kozlarek said scanners bring him one step closer to the world around him. "Why do you read newspapers" he asked? Scanners, he says, give him "access to news that may not be in the newspaper." "You'd be surprised what you can find out in your neighborhood," he said. One time, he even overhead a stakeout by the FBI, he said.

Were Calafiore keeps his scanning to himself, Kozlarek who brought his first scanner home in his early teens, is a proselytizer. "My mother said, what are you going to do with that...?, he said. But her attitude soon changed. "It took about a week," Kozlarek said, before he would come home to find his mother crocheting to the sound of cop talk. "She got hooked", he said.

Although Kozlarek's wife, Linda, has put her foot down and now insists that he turn the scanner off in their bedroom at night, her mother, Helen, has become hooked. Kozlarek said his mother-in-law watches New Jersey Devils games with the sound off, opting for the sound of police and fire chatter. "It's contagious." Linda Kozlarek said.

Every Wednesday, Kozlarek and friends run an on-air question and answer group that people can tune into with their scanners or ham radios. He also answers questions that he gets by e-mail. The group is growing quickly, he said. There are about 75 regulars who check in weekly, and on a recent night 9 new people tuned in. In addition, over 100 people receive his on line newsletter.

Kozlarek is quick to say that scanner listening is not about thrills for "serious" enthusiasts - whom he defines as being someone as owning more than two scanners. "I'm not chasing fire engines", he says - "that's not what it's about."

Police offers say they generally don't mind civilians eavesdropping - as long as they stay away from the action. Moonachie Police Chief Michael McGahn said

he generally doesn't pay much mind to scanner enthusiasts, but notices that often people from other towns turn out to watch fires. Usually crowds are a problem at a large fire," he said.

Glen Rock Captain William K Kealy echoed these sentiments, but added another potential problem: People sometimes misunderstand things they hear on scanners, then go a spread rumors - often about neighbors. At least one officer sees a positive aspect to being listened to. "I'm glad they do, because then they'll see how busy we are." said Fairlawn Police Officer David DeLucca, vice president of the local Policemen's Benevolent Association. "We are glad people are interested."

For many listeners, the hobby is about knowing where the fire truck and police cars are. Eisenberg said many of his customers are seniors who want to know where the trouble is, especially those who live in dangerous areas. "People are afraid to go out in their back yards," Eisenberg said.

Others have more personal reasons. Paterson resident Peggy Thys keeps tabs on her family with her scanner. Her father is a dispatcher, so she can spend her evenings listenings to his voice. When her daughter Melissa was out in the car one evening, Thys heard police run a check on her license plate. For Thy's youngest daughter, Amanda, a backdrop of scanner chatter has always been as normal as the birds singing outside her window. One of the first things she said was, "10-4," Thys said.

Editors Note: Sorry for the crummy picture, but this was the best I could do scanning it from the newspaper!
-WA2SQQ

COMMENTS ON BERGEN RECORD ARTICLE

DE: N2QAY

Congrats on the nice article in the Record !!!

I thought the article was pretty well balanced and didn't concentrate on the perceived "negative" aspect of the hobby that so many newspapers like to dwell on. Scanning is the next best thing to being a ham. As we both know, scanning is the entry way for many current hams that got interested in just listening and decided to pursue the next level of the radio hobby and become hams. With radio frequency spectrum becoming so valuable...we need to grow the base of hams to save the frequency allocations that we currently have.

If scanning is a way to get new people interested to go the next step..great.

Don N2QAY

# FEEDBACK FROM OUR LISTENERS Bob - Charlie:

Had a chance this morning to view your WWW homepage and reading the history of NYDXA.

The paragraph on Sig Hoffman's role in NYDXA brought back some memories as I had worked in the same NYC agency as Sig, and in fact he introduced himself to me when he had heard that I was an SWL. Specifically, Sig was interested in getting involved in SWL and Utility monitoring after a lapse since his time in the Merchant Marine during WWII. He asked me for suggestions on which radio he should purchase and I recommended a Sony. Since I also lived in Flushing, Sig and I kept in regular contact, but in 1982 I moved out to Nassau County, and subsequently also obtained employment with a federal agency. However, I did see Sig after he retired but lost contact with him as I began to travel on a regular basis. In time I heard of his passing while visiting my old agency.

Just one other note. I enjoyed last Wednesday's special net with OEM Coordinator Det.. Stuart Goldstein. It was very interesting and informative!

#### **MARK N2QAI**

#### SCANNING & THE FCC

Have you ever wondered what the FCC's opinions were on scanners and people who use them? Bill Donnelly passes along an interesting site -

# INTERCEPTION AND DIVULGENCE OF RADIO COMMUNICATIONS

Check it out on the web at http://www.fcc.gov/investigation.html

#### MARS PATHFINDER

OK, think your scanner is sensitive enough to hear Pathfinder? Tell me you haven't said to yourself, "gee I wonder what frequency all these neat pictures are being sent to earth on and how much power are they using? While watching the Mars Pathfinder coverage this weekend, I got interested in the details of the downlink calculations. So I started searching the web

for the numbers I needed. While there's a wealth of information from JPL on the web, including the complete Deep Space Network user's manuals, I couldn't find one basic number anywhere: the lander antenna gains!

The numbers show that on July 4, 1997 the Mars Pathfinder X-band downlink could just support a data rate of 4740 bps through one of the 34-meter Deep Space Network (DSN) antennas. The 70-meter antennas, having about 6dB more gain, could support the fastest Pathfinder data rate of 11,060 bps with about 2.3 of extra margin.

The estimated 34m receive signal power of -146dBm was probably conservative, meaning the actual antenna gain is probably more than 17.2 dB.

If somebody from JPL telecommunications sees this, I'd be very interested in any corrections or additions, particularly the actual gain numbers for the lander high and low gain antennas. Check out this page where they claim all this was done with a mere 35W of RF @ 8.420 ghz! Anybody got a mod for the 2006 to get up in frequency a few ghz!

http://people.qualcomm.com/karn/mpf\_budget.html

#### COMMENTS DE W2ZH

Heard your net on Wed. night....I use to check into W2snm years back.......Was a Radio Dispatcher/Boro Coordinator for NYPD /911 from 1979 to 1987.....Now Working at NYCHA....250 Bway...My call is W2ZH----was Kd2u.......licensed in 1963.......Just some background....Will be listening to you....Is the repeater PLLed??? c u on the radio...de Bill...73 W2ZH....

#### FEDERAL FINDINGS de N2NOV

First, here is a matrix of the Federal Trunked system as it appears in Scanner Master. I marked the activity of the past week. Mostly units checking in at apox. 4PM with 3 digit codes. Today I heard units that mentioned various postal sites in NYC and LI.:

X=Activity	D=Data	Channel
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GROUP	FREQ	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul
1	415.150	Χ	D	Χ	D	Χ
1	415.950	Χ	Χ	Χ	Χ	Χ
1	416.750					
1	417.550					
1	418.350	D	Χ	D	Χ	D
2	414.750					
2	415.550	Χ	Χ	Χ	Χ	Χ
2	416.350					
2	417.150					
2	417.950					
3	415.350					
3	416.150					
3	416.950	Χ	X	X	Χ	Χ
3	417.750					
3	418.550					
4	414.950					
4	415.750					
4	416.550					
4	417.350					
4	418.150					

Some of the unused frequencies I have listed as being used by various agencies. Maybe they will move off-frequency to accommodate the new system or they will be incorporated into it. de N2NOV

#### DOITT DATA

Here are some additionals for the Type II part of the DOITT system: (Most of it is Type I - b0:s-4 b1:s-0 b2:s-12 b4:s-13 [User Fleet Map])

<u>Uniden</u>	<u>/16</u>	<u>Hex</u>	<u>USER</u>
8192	512	200	
8208	513	201	DOITT TECHS W/RADIO CHECKS & NEXTEL PATCH
8224	514	202	SPEC. NARC. PROSECUTOR
8240	515	203	
8256	516	204	JACOBI HOSPITAL
8272	517	205	
8288	518	206	6-A FDNY ADMIN.
8304	519	207	6-B FDNY OPS
8320	520	208	6-C FDNY COMMS & C.O. OFFICES
8336	521	209	?
8352	522	20A	6-D FDNY COMMS ADMIN.
8368	523	20B	
8384	524	20C	CHILD WELFARE ADMIN.
8400	525	20D	
8416	526	20E	

8432	527	20F	DOI/FDNY BUR. OF EMS INSPECTIONS
8448	528	210	DOI/FDNY BUR. OF EMS INSPECTIONS
8464	529	211	DOI/FDNY BUR. OF EMS INSPECTIONS
8480	530	212	
8496	531	213	
8512	532	214	HOUSING & PRESERVATION DEPT (H.P.D.)
8528	533	215	HOUSING & PRESERVATION DEPT (H.P.D.)
8544	534	216	?
8560	535	217	? POSS. FIRE MARSHALS
8576	536	218	
8592	537	219	
8608	538	21A	FDNY MARSHALS & SOCIAL CLUB TASK FORCE
8624	539	21B	? "16 TO"
8640	540	21C	D.O.I. CITYWIDE INVESTIGATIONS
8656	541	21D	
8672	542	21E	
8688	543	21F	? "RE: DOH GUY & IBM TECH SVC CALL"
8704	544	220	CHIEF MEDICAL EXAMINER
8720	545	221	NYC HOUSING AUTH. CITYWIDE MAINT.
8736	546	222	NYC HOUSING AUTH. EMERGENCY CREW
8752	547	223	?
8768	548	224	? "1C TO 1A"
8784	549	225	
8800	550	226	? POSS. CITY SHERIFF "S UNITS"

# NYCTA is definitely a Type II system. Some of the Ids:

80	SUPV FRESH POND DEPOT
112	W 5TH TO ULMER YARD
176	BX4 LINE SUPV. / WALNUT DEPOT (BRONX)
336	ROOSEVELT EAST SUPV. / STENGEL DEPOT (FLUSHING)
400	SUPV 8TH ST / AVE D / UNION SQUARE MANH
496	PELHAM BAY
560	S.I. EXPRESS BUS SUPV. RE: DETOUR @ WEST ST. AND WTC
624	145TH ST MANHATTAN
720	?
2736	ANN. TO M5 DRIVERS IN MANH+"M101"
3376	ANNOUNCEMENT TO BUSSES OUT OF KINGS BRIDGE
3536	ANN. RE: 145TH ST PROBLEMS TO PASSENGERS
5657	SUPV. RE: DRIVERS MAKING RIGHT TURNS
8880	ANN. TO S53 & 79 RE: BKLYN PROBLEMS NR VZ
9600	ANN. TO PASSENGERS OF TRANSFERS
9616	ANN. TO PASSENGERS OF TRANSFERS
9840	SUPV RE: B63@ SHORE ROAD
9872	145TH ST & 8TH AVE SUPV.
24688	AVENUE H
28944	PROPERTY PROTECTION CH 1
28976	PROPERTY PROTECTION CH 2
31920	TRUCK 064
31952	PROSPECT PK AREA TRUCK TO EAST NY SHOP
35184	MANH M57 BUS
38480	?

#### NYC EMS TRUNK INFO

Hi Bob,

I would assume that Dave forwarded this to you also but just in case here is some info that he gathered. Personally Freddy (N2PQQ) an myself have been using the system 2 and it seems to be working fine. Ill send you my list of frequencies confirmed using system 2.

Here's some NYC trunked systems info I've collected...it'll be of more use to you than to me at this point.

Didn't try to get the radio any faster because we'll be out of town thru the weekend anyway.

73, DRA

NEW YORK CITY EMS/NYFD AMBULANCE 800 MHz TRUNKING SYSTEM }-----

#### SYSTEM SPECIFIC DATA

System Type......Motorola Type-I
System ID...........0B36
Fleet ID/Size Code.......000/D
Fleet ID/Size Code.......200/M
Fleet ID/Size Code.......200/M
Fleet ID/Size Code.......400/D
Fleet ID/Size Code.......500/D
Fleet ID/Size Code.......500/D
Fleet ID/Size Code.......700/D
Connect Tone (Hz).....#1- 76.60

Control Channels.....

1-860.9875

2-860.7375

3-858.9875

4-859.9875

System Channels......

5-857.9875

6-856.9875

#### TRUNKING TALKGROUP (CHANNEL) ASSIGNMENT

\_\_\_\_\_

Zone	Channel Name	Fleet	Talkgroup
MANH	AMB DISP A	000	001
MANH	SUPV DISP	000	002
MANH	SUPV-SUPV	000	005
MANH	BORO CMD	000	007
BRONX	AMB DISP A	100	001
BRONX	SUPV DISP B	100	002
BRONX	SUPV-SUPV E	100	005
BRONX	BORO CMD G	100	007
CTYWD	AMBULANCE	200	001

MCI B QARV DESK FDNY DESK DIV /TRAING SPC EVENT N S EVENT MAN SOUTH MAN CENTRAL ROADSIDE SO MCI PSY TRAN SV TELM CONTRL	200 200 200 200 200 200 200 200 200 200	002 003 004 005 006 007 008 009 00A 00B 00C 00D
AMB DISP A SUPV DISP SUPV-SUPV BORO CMD	400 400 400 400	001 002 005 007
AMB DISP SUPV DISP SUPV-SUPV BORO CMD	500 500 500 500	001 002 005 007
AMB DISP A SUPV DISP B SUPV-SUPV E BORO CMD G MARS DESK	600 600 600 600	001 002 005 007 00A
EXC DIR A EXC DIR B CHIEF OPS INSP SVC CIV COMPL DIV TS SOD DIV RADIO SHP COMM DIV OPS DIV DCPI	700 700 700 700 700 700 700 700 700 700	001 002 004 006 007 008 009 00B 00D 00E 00F
	QARV DESK FDNY DESK DIV /TRAING SPC EVENT N S EVENT MAN SOUTH MAN CENTRAL ROADSIDE SO MCI PSY TRAN SV TELM CONTRL  AMB DISP A SUPV DISP SUPV-SUPV BORO CMD  AMB DISP SUPV-SUPV BORO CMD	QARV DESK         200           FDNY DESK         200           DIV /TRAING         200           SPC EVENT         200           N S EVENT         200           MAN SOUTH         200           MAN CENTRAL         200           ROADSIDE         200           SO MCI         200           PSY TRAN SV         200           TELM CONTRL         200           AMB DISP A         400           SUPV DISP         400           SUPV-SUPV         400           BORO CMD         400           AMB DISP         500           SUPV-SUPV         500           BORO CMD         500           AMB DISP A         600           SUPV-SUPV E         600           BORO CMD G         600           MARS DESK         600           EXC DIR A         700           EXC DIR B         700           CHIEF OPS         700           INSP SVC         700           CIV COMPL         700           NOD DIV         700           RADIO SHP         700           COMM DIV         700           OPS DIV

### CONVENTIONAL CHANNEL ASSIGNMENT

\_\_\_\_\_

<u>Zone</u>	<u>Channel</u>	Receive	<u>Transmit</u>	<u>Direct</u>
CONV CONV	RICH CONV MAN NORTH MUT AID 1	854.9875 855.4875 866.0125	809.9875 810.4875 821.0125	854.9875 855.4875 866.0125
Zone CONV CONV	Channel MUT AID 2 MUT AID 3	Receive 866.5125 867.0125	Transmit 821.5125 822.0125	<u>Direct</u> 866.5125 867.0125

CONV	MUT AID 4	867.5125	822.5125	867.5125
CONV	MUT AID 5	868.0125	823.0125	868.0125
CONV	MDT DATA	854 9625	809 9625	

NYC DOITT 800MHz SYSTEM

400-O(15) "

- . . l- £l - - £

NYC DoITT - System ID 0A02 fleet 000 - size "D" fleet 100 - size ??? (I dunno yet) fleet 200 - size "M" (there cannot be a fleet 300 due to size of fleet 200) fleet 400 - size "O" (that's letter "O") (there cannot be a fleet 500 or 600 or 700 due to size of fleet 400) 000-O(15) called the "Mutual Aid Channel" by all agencies 200-O(15) "

Note: often subfleet 15 is called "P" even though it is actually "O" to avoid confusion with the number zero. The real "P" or fleet wide mode which is numbered zero (00) is seldom ever used. DoITT calls "O" out as "P" on their radios.

```
000-A(01)
              Office of Emergency Management
              New York "Bronx" Botanical Gardens
000-D(04)
000-J(10)
              Sounds like the Department of Buildings
              Taxi & Limo Commission
200-A(01)
200-B(02)
200-C(03)
200-D(04)
              T&LC Administration
              Corrections - Radio Shop (basically unused at the current time)
200-F(06)
200-G(07)
              Corrections - ERU - Emergency Response Unit
200-H(08)
              Corrections - Support Services
              Sounds like Juvenile Justice (heard "residents" and "Spofford")
200-J(10)
200-N(14)
              Sounds like Animal Control/Rescue
200-K(11)
              ??? traffic about doing sidewalk cafe sweep and units calling
              "padlock supervisor" maybe consumer affairs or health or ???
```

fleet 400 is entirely the DEP (Water Dept) as follows-

subfleet	description
A(01) B(02) C(03) D(04)	EXEC Executive WS/MAN Manhattan (WS = water & sewer?) WS/BX Bronx WS/BKL Brooklyn
E(05)	WS/QNS Queens
F(06) G(07)	WS/SI Staten Island WT/ADM (WT = ???)
H(08) I(09)	WT/N+S WT/PLN
J(10) K(11	AIR(obvious) WTR-RG (???)
L(12) M(13)	HAZMAT (obvious) HC/SEW (???)

N(14) FLT/OP (???)

O(15) DGS (Patched to 000-"O" and 200-"O" and ???)

P(00 "FW") not used (this is the "real" fleet wide mode)

#### Some useful info:

In Motorola terms the first subfleet in a type-I system is "1" or "A". The subfleet "0" (zero) is the "fleet wide" mode. Not what you might think at first.

The following chart (in Motorola-ese) might help clarify things. Take a look at the data word construction and how the number of bits allocated to prefix, fleet, subfleet, and individual ID vary with sizecode.

Valid SIZE CODES are: A,B,C,D,E,F,G,H,I,J,K,M,O,Q

The SIZE CODE determines the maximum number of fleets, subfleets, and individual IDs allowed. The SIZE CODE and fleet ID chosen must match the programming of the Central Controller.

Size	Code	Prefix	Fleet	Subfleet	Individual ID	Data Word Bitmap
Α	0 - 7	00 - 7F	A - C	000	00F	PPPFFFFFFSSIIII
В	0 - 7	00 - 0F	A - G	000	03F	PPPFFFSSSIIIII
С	0 - 7	00 - 07	A - G	000	07F	PPPFFFSSSIIIIII
D	0 - 7	00 - 00	A - O	000	1FF	PPPSSSSIIIIIIII
Е	0 - 7	00 - 3F	A - C	000	01F	PPPFFFFFSSIIIII
F	0 - 7	00 - 1F	A - G	000	01F	PPPFFFFSSSIIII
G	0 - 7	00 - 1F	A - C	000	03F	PPPFFFFSSIIIII
Н	0 - 7	00 - 0F	A - C	000	07F	PPPFFFFSSIIIIII
1	0 - 7	00 - 07	A - C	000	0FF	PPPFFFSSIIIIIII
J	0 - 7	00 - 03	A - G	000	0FF	PPPFFSSSIIIIIII
K	0 - 7	00 - 01	A - O	000	0FF	PPPFSSSSIIIIIIII
M	0246	00 - 00	A - O	000	3FF	PPSSSSIIIIIIIII
0	0 - 4	00 - 00	A - O	000	7FF	PSSSSIIIIIIIIII
Q	0 - 0	00 - 00	A - O	000	FFF	SSSSIIIIIIIIIII

The Fleet ID is a three digit hexadecimal number where the first digit is the Prefix and second two digits are the Fleet. For any size code the subfleets for Fleet wide and Dynamic Regrouping are always available.

David R. Alpert, KB2LUM ABC News dra@pipeline.com - home alpertd@abc.com - work

NYC FD INFO de WARREN, N2RAH

**BOB / NET MEMBERS:** 

Some info on the FDNY Bureau of EMS 800 MHz Trunked Radio System NEW YORK CITY BEMS/FDNY AMBULANCE 800 MHz TRUNKING SYSTEM

#### SYSTEM SPECIFIC DATA

System Type Motorola Type-I System ID 0B36

Fleet ID/Size Code 000/D Uniden S-0 S4

Fleet ID/Size Code	100/D	S-1	S4
Fleet ID/Size Code	200/M	S-2	S12
Fleet ID/Size Code	400/D	S-4	S4
Fleet ID/Size Code	500/D	S-5	S4
Fleet ID/Size Code	600/D	S-6	S4
Fleet ID/Size Code	700/D	S-7	S4
Connect Tone (Hz)	#1- 76.60		
Control Channels	1- 860.9875		
	2-860.7375		
	3-858.9875		
	4- 859.9875		
System Channels	5-857.9875		
	6-856.9875		

I have used this setup and it is correct for this type I system, you may use this in the Newsletter. I will be updating you as I get more info on the DOITT system Also I will send you a list of the agencies on the ALERT system

WARREN, N2RAH

#### MARKEY'S MADNESS!!

To all my fellow hobbyists on SCAN-L, USENET radio groups, and the Grove Scanner Groups I have some bad news that DIRECTLY effects the radio hobby above 30 MHz. I'm not going to wait on the presses here at Grove to roll because this legislation needs to be stopped now before it gets out of committee. This bill will probably end the scanner hobby is we know it.

Another assault on the scanning hobby has begun by Congress and our dear, dear friend the honorable Edward Markey (D-MA). Markey has introduced H.R. 1964. This bill in section 104 makes major changes to Section 302 (d) of the Communications Act of 1934 (47 U.S.C. 302(d)). Most of you who are students of the cellular telephone frequency wars should remember this section. If not let me refresh your memory. This is the section of US Code that prohibits the manufacture of any scanner capable of receiving the cellular telephone bands.

Well Markey has taken this to a new level with H.R. 1964. If passed the new language would now read:

- (a) The Commission shall prescribe and make effective regulations denying equipment authorization (under part 15 of title 47, Code of Federal Regulations, or any other part of that title) for any scanning receiver that is capable of:
- (1) receiving transmissions in the frequencies allocated to a commercial mobile radio service (as such term is defined in section 332(d));

- (2) readily being altered by the user to receive transmissions in such frequencies, or
- (3) being equipped with decoders that convert digital commercial mobile transmissions to analog voice audio.
- (b) Effective Date of Prohibitions on Regulation Amendments -- The prohibitions contained in section 302 (b) of the Communications Act of 1934 shall apply with respect to the changes made by the Federal Communications Commission in its regulations to implement the amendments made by subsection (a) of this section beginning 1 year after the effective date of such changes.

On the surface this looks like a yawner. But lets dig a little deeper into Markey's bomb shell and see what it really says. What is the commercial mobile radio service or CMRS?

From Bennett Z. Kobb's Spectrum Guide let's see what frequencies this effects. Comments in parenthesis are mine.

"The FCC is changing the terminology it traditionally has used to classify radio services. The new terminology is somewhat more opaque. An essential distinction is between PMRS and the commercial Mobile Radio Services (CMRS). Licensees of CMRS businesses provide for-profit, telephone interconnect (mobile and portable telephone or dial-up paging) service to the public.

"Examples of CMRS include private paging services (except for not-for-profit, internal paging systems); Business Radio Service Systems (anything with an IB designation in the Police Call consolidated frequency list folks-Larry); Specialized Mobile Radio (SMR) services (this hits the 851-866 MHz band and that includes most the comms that the new trunk tracker can monitor including the majority of the public service agencies using trunked systems); and 220-222 MHz land mobile systems, to the extent all of these offer for-profit, telephone-interconnected service to the public; Public Mobile Services such as Paging and Radiotelephone services and the Cellular Radiotelephone Service the 454 MHz and 800 MHz air-ground radiotelephone service; the Offshore Radiotelephone Service; most types of mobile satellite services; and the Personal Communications Services (PCS).

"Previously, most for-profit mobile services were called "radio common carriers." This term has not completely disappeared from use.

"Recent legislation brought all for-profit mobile radio services under the CMRS umbrella. Some former PMRS services were reclassified as CMRS because they are largely devoted to for-profit service with interconnection to the public telephone network. In some cases PMRS and CMRS operations share bands."

Now let's look at the bottom line. Here are the frequencies you will lose in any future scanner you will buy if this bill becomes law.

Commercial Mobile Radio Services

- 1) Private Paging Services
  Private carrier paging system (PCPS):
  929-930/931-932 MHz
- 2) Business Radio Services

VHF low band: 30.76-31.24 (9 discrete freqs)/33.14-33.16/33.40/35.02-35.14/35.18/35.7-35.72/35.88-35.98/42.96-43.00 MHz VHF Hi-band: 151.625-151.955/154.570-154.600 MHz UHF band: 457.525-457.600/460.650-462.1875/465.650-467.187 5/462.750-462.925/467.750-467.925/463.200-465.000 /468.200-470.000 MHz

There are also a number of chunks of the 470-512 MHz that will be removed.

3) Specialized Mobile Radio (SMR) Services

851-866 (806-821 MHz)/ 935-940 (896-901 MHz)

This is the only area I see that we can fight this law. Those of you who have trunk trackers look in your trunk freq book and see how many public safety agencies have been allowed to invade this portion of the spectrum.

There just wasn't enough room from them in the 866-869 MHz portion of this band. I see this as the only area we can really fight this resolution, the publics right to hear public safety agencies (even though the SMR bands are private thanks to the FCC auctions of the spectrum). The other scary part of this legislation is that no decoders would be allowed that would decode digital commercial mobile radio services. Can you say digital Motorola trunk systems? Wonder how much they donated to the Markey campaign? As I have said on many occasions and in the April 97 MT article on all this, "follow the money trail." No wonder Motorola didn't care about the 235. It was only a flash in their pans with this legislation.

- 4) Land Mobile Services in the 220-222 MHz region (recent reg changes have turned this over to the CMRS)
- 5) Public Mobile Services
  - A) Paging and Radiotelephone Services

35.2-35.66/43.2-43.66 MHz/152.030-152.240/152.480-152.840 MHz 154.625/157.740-158.100/158.460-159.700 MHz

- B) Cellular Radiotelephone Service 869-894 MHz (824-849 MHz mobiles)
- C) 454 MHz Air-Ground Radiotelephone Service 454-455 MHz (459-460 MHz mobiles)
- D) 800 MHz Air-Ground Radiotelephone Service 894-896 MHz (849-851 MHz mobiles)
- 6) Offshore Radiotelephone Services

157.200-157.400/161.800-162.000 MHz/AMTS 216-220 MHz

#### 7) Satellite Mobile Services

137-138 MHz NVNG (148-150.050 uplinks)/399.9-400.050 1525-1559/1610-1660.5 MHz

#### 8) Personal Communication Services (PCS)

901-902/930-931/940-941/1850-1990 MHz

So there you have it. The above listed frequencies would have to be removed from new scanners being made prior to the type acceptance of any new scanner. Existing models would have to be decertified then recertified to prove that the new illegal to listen to ranges couldn't be received (the AR-8000 syndrome). This is the situation we have today with the cellular bands and it would now be expanded to the commercial mobile radio service if HR 1964 is passed.

Ladies and Gentlemen I think you can see this is a serious threat. If you don't get involved this time in stopping this legislation, you will see the hobby of scanning listening cease to exist in the very near future. Get off your rears and write your elected representative right now. This potential new law is in the House Commerce Committee right now. Let's kill it before it gets to the floor of the House and it becomes law.

Please give this message the widest possible circulation. Only numbers of voters will overcome the millions that our elected officials have taken in campaign contributions and will get this insanity stopped.

I will have updates as they become available and keep a watch at www.grove.net and the scanner discussion forums as new info is available. 73 to all and let's start writing/faxing today,

Larry Van Horn, N5FPW Assistant Editor Monitoring Times magazine

#### OEM / DOITT ROLL CALL

There does not seem to be any specific time but usually around 10:00 am you can listen to the OEW roll call on the DOITT trunked system. Here's the normal attendance list.

PD OPERATIONS PORT AUTHORITY POLICE DESK DEPARTMENT OF CORRECTIONS HOUSING AUTHORITY ESU MOPD 2 FIRE DEPT ERC FIRE DEPARTMENT CITYWIDE RADIO FIRE DEPARTMENT BRONX OPERATIONS FIRE DEPARTMENT BROOKLYN RADIO FIRE DEPARTMENT NEW YORK/QUEENS FIRE DEPARTMENT STATEN ISLAND **EMS CITYWIDE RADIO** NYNEX LIASON DEPARTMENT OF ENVIRONMENTAL PROTECTION **CENTRAL COMMUNICATIONS** DEPARTMENT OF HEALTH ENVIRONMENTAL **RESPONSE** DEPARTMENT OF HOMELESS SERVICES BASE DEPARTMENT OF BUILDING OPERATIONS DOT COMMUNICATIONS NEW YORK CITY SHERIFF DEPARTMENT METRO TRAFFIC AMERICAN RED CROSS SALVATION ARMY U. S. COAST GUARD ACTIVITIES NEW YORK **NEW JERSEY TRANSIT POLICE** METRO NORTH RAILROAD POLICE LONG ISLAND RAILROAD POLICE **BROOKLYN UNION GAS** CON EDISON CIG NASSAU COUNTY OEM DEPARTMENT OF HEALTH POISON CONTROL CENTER TRANSIT RTO SUPERINTENDENT CHIEF MEDICAL EXAMINER

#### UPDATED EXPANDED AM BAND LIST

NYC DEPARTMENT OF PARKS

An updated list of the stations assigned to the expanded portion of the AM Broadcast band appears on line at

http://fly.hiwaay.net/~waholler/expanded.htm

There has been much talk about the reassignments the FCC had to do to comply with assignment guidelines. This is a worth while sight for any AM Broadcast band DX'er.

#### JFK TRAVELER ADVISOR RADIO

First they were on 530, then recently 1630, but getting interference from Pirate, so they moved to 1650 (right next to powerhouse 1660 WJDM Elizabeth NJ (20 miles away)) Where will they go next?

KIWI SCANNING

Want to see how it's down from the land down under check out this neat URL that describes scanning in New Zealand. This is a class 1 site along with midi music.

http://homepages.ihug.co.nz/~njones/

PRO2026 & "The Forbidden" BAND Conflicting information suggests that this may not apply to the most recent 2026's now being sold. Be that as it may, if it helps one of our readers it was worth the effort!

The 2026 has cellular frequencies deleted at the factory, but restoration is the easiest ever! - clip one marked wire! All you need is a Philips screwdriver and wire cutters.

- 1. Turn the scanner upside-down and remove the four side screws holding the bottom cover in place; pull the cover loose and set it back about two inches out of the way.
- 2. Locate the small circuit board at the lower right-hand corner and find jumper L201. Cut it and slightly separate the break.
- 3. Reassemble the radio which now has continuous 806-956 MHz coverage and 30KHz search increments in the cellular band.
- \*\*\* I have not tried the above mod, but did acquire it from a commercial radio dealer who is very respectable, so as always, proceed at your own risk and realize that this will violate your warranty! Have Fun! Rob KF2EK

CON FD TRUNK SYSTEM INFO

CON ED TYPE I SYSTEM LAYOUT (b0=S13; b4=S13):

#### [LISTED ACTIVITY WAS ON 7/17]

0-000	132ND ST - MANH
000-1	E63RD ST, 35TH & 7TH AVE - MANH
000-2	POSS. S.I.
000-3	W91ST ST, FEEDER CTRL - MANH
000-4	WALL ST, PEARL ST - MANH
000-5	44TH ST - MANH
000-6	3RD AVE - MANH
000-7	GAS CHAN 2 - MANH

000-8 000-9 000-10 000-11 000-12 000-13 000-14 000-15	95TH & 2ND AVE - MANH ?
400-12 400-13	QNS QNS "NETWORK" - QNS "OVERHEAAD" - QNS GAS - QNS & BRONX 32ND AVE - QNS ? 50TH AVE - QNS ? DEMAND INSPECTIONS - QNS TESTING

#### 73's - Charlie N2NOV

#### TRACKER 3.0

http://www.geocities.com/CapeCanaveral/Lab/1060/im prvtrk.htm

#### Origin:

Some time ago there appeared on USENET a program and its source code that provided the rudimentary ability to decode Motorola Type I, II, and Ili trunking radio system data. This program is a minor embellishment of that program, and as such, is also in the "public domain" with no support by anyone. It is totally free, and anyone attempting to make commercial use of it will probably become a target of Motorola's legal department. Features

- \*Decodes and displays the data stream.
- \*Remembers, via .TXT files, the characteristics of each trunked system, using the sysld field as a unique key. When identifying a previously monitored system, retrieves the stored data from text files saved in previous runs.
- \*Allows the user to augment the group and individual IDs with color assignments, priorities, and text descriptions.

*Will drive a AOR AR8000 scanner in 'trunk-tracking'
mode using the TxOut lead of COM1(providing
appropriate level conversions are supplied)

- \*Allows on-screen input/update of group and individual text descriptions while trunker is running
- \*Upon first encountering a new individual ID, provides an initial description text indicating the group which it first contacted.

#### Requirements

Trunker 3.0 is intended to run under MS-DOS. Although it has been shown to run under Windows-95, no assurances are made of compatability or fitness for use. Those attempting to try should use `Full Screen' mode and have at least a P133 processor. Trunker 3.0 requires the data slicer to apply its digital output to the CTS input of COM1, and COM1 is required to use the standard interrupt and I/O addresses. The DSR and CD inputs are ignored and might be used by future versions to support single-scanner trunk tracking. Data Files Trunker 3.0 generates and later reads four different data files, with names based on the 16-bit sysld value

#### WE NEED TO KNOW...

Charlie and I are curious to know how many of you are using some sort of computer interface to control your scanner. What software are you using and what receiver is it used with? We're going to be doing a review on a piece of scanning software and we may need beta testers. If you qualify, we'll be in touch! Please address your responses to wa2sqq@hili.com

### NYC EMS TRUNK INFO

Fleet Map: "Preset" E1P5

000-2	Manhattan Ambulance Dispatch "A" Manhattan Supv. Dispatch Manhattan Supv - Supv Manhattan BORO Command	<u>UNIDEN</u> S4 S4 S4 S4 S4
100-2	BRONX Ambulance Dispatch "A" BRONX Supv Dispatch "B" BRONX Supv - Supv "E" BRONX BORO Command G	S4 S4 S4 S4
200-2 200-3 200-4	CTYWD Ambulance CTYWD MCIB CTYWD Desk CTYWD FDNY Desk CTYWD Div / Trng	S12 S12 S12 S12 S12 S12

400-1 BKLN Ambulance Disp "A" S4 400-2 BKLN Supv Disp. S4 400-5 BKLN Supv - Supv S4 400-7 BKLN BORO Command S4 500-1 QNS Ambulance Disp "A" S4 500-2 QNS Supv Dispatch S4 500-5 QNS Supv - Supv S4 500-7 QNS BORO Command S4 600-1 SI Ambulance Dispatch "A" S4 600-2 SI Supv Dispatch "B" S4 600-2 SI Supv Dispatch "B" S4 600-5 SI Supv - Supv E S4 600-7 SI Boro Command G S4 60010 SI MARS Desk S4 60014 SI Hospital Police S4 700-1 ADMIN Exc Dir "A" S4 700-2 ADMIN Exc Dir "B" S4 700-4 ADMIN Chief Ops S4 700-6 ADMIN Insp Svc S4 700-7 ADMIN Civil Complaint S4 700-8 ADMIN Div Tech Services S4 700-9 ADMIN SOD Div S4 70013ADMIN Radio Shop S4 70013ADMIN Comm Div S4 70013ADMIN Comm Div S4 70015ADMIN OPS Division S4 70015ADMIN OPS Division S4	200-7 CTYWD North Special Event 200-8 CTYWD Manh So. Disp 200-9 CTYWD Manh Cent. Disp 20010 CTYWD Roadside Repair 20011 CTYWD So. MCI 20012 CTYWD PSY SV 20013 CTYWD Telm Control 20014 CTYWD No. Special Event 20015 CTYWD No. MCI	\$12 \$12 \$12 \$12 \$12 \$12 \$12 \$12 \$12 \$12
500-2 QNS Supv Dispatch 500-5 QNS Supv - Supv 500-7 QNS BORO Command 54  600-1 SI Ambulance Dispatch "A" S4 600-2 SI Supv Dispatch "B" S4 600-5 SI Supv - Supv E S4 600-7 SI Boro Command G S4 60010 SI MARS Desk S4 60014 SI Hospital Police S4  700-1 ADMIN Exc Dir "A" S4 700-2 ADMIN Exc Dir "B" S4 700-4 ADMIN Chief Ops S4 700-6 ADMIN Insp Svc S4 700-7 ADMIN Civil Complaint S4 700-8 ADMIN Div Tech Services S4 700-9 ADMIN SOD Div S4 70011 ADMIN Radio Shop S4 70012 OMD S4 70013ADMIN Comm Div S4 70011ADMIN OPS Division S4	400-2 BKLN Supv Disp. 400-5 BKLN Supv - Supv	S4 S4
600-2 SI Supv Dispatch "B" S4 600-5 SI Supv - Supv E S4 600-7 SI Boro Command G S4 60010 SI MARS Desk S4 60014 SI Hospital Police S4 700-1 ADMIN Exc Dir "A" S4 700-2 ADMIN Exc Dir "B" S4 700-4 ADMIN Chief Ops S4 700-6 ADMIN Insp Svc S4 700-7 ADMIN Civil Complaint S4 700-8 ADMIN Div Tech Services S4 700-9 ADMIN SOD Div S4 70011 ADMIN Radio Shop S4 70012 OMD S4 70013ADMIN Comm Div S4 70014ADMIN OPS Division S4	500-2 QNS Supv Dispatch 500-5 QNS Supv - Supv	S4 S4
700-2 ADMIN Exc Dir "B"       \$4         700-4 ADMIN Chief Ops       \$4         700-6 ADMIN Insp Svc       \$4         700-7 ADMIN Civil Complaint       \$4         700-8 ADMIN Div Tech Services       \$4         700-9 ADMIN SOD Div       \$4         70011ADMIN Radio Shop       \$4         70012 OMD       \$4         70013ADMIN Comm Div       \$4         70014ADMIN OPS Division       \$4	600-2 SI Supv Dispatch "B" 600-5 SI Supv - Supv E 600-7 SI Boro Command G 60010 SI MARS Desk	S4 S4 S4 S4
	700-2 ADMIN Exc Dir "B" 700-4 ADMIN Chief Ops 700-6 ADMIN Insp Svc 700-7 ADMIN Civil Complaint 700-8 ADMIN Div Tech Services 700-9 ADMIN SOD Div 70011ADMIN Radio Shop 70012 OMD 70013ADMIN Comm Div 70014ADMIN OPS Division	\$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4

200-6 CTYWD Special Events

S12

#### EMS also uses non trunked channels at

855.4875	Man North
854.9875	Bklyn S / SI
477.8375	Bnx So.
478.2125	Bnx No.
477.8625	Bklyn Central
477.9125	Queens
478.2625	Brooklyn
478.0125	Citywide

Unit ID's consist of first two digits being Battalion #, third digit is unit #.