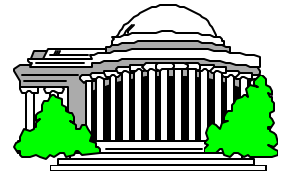




The Capitol Hill Monitor



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THIS ISSUE: The New PGFD freqs * Kent Co's FD channel plan * Worcester Co gets EDACS'ed * Trunk Tidbits for Cecil/Charles/Harford/Howard * Monitoring Customs/Combat Air Patrols * D.C. Emer Radio Net is Born * Scanner Links You Can Use!

MONTGOMERY COUNTY'S PS-2000 NEARS COMPLETION

Montgomery County continues to push ahead with its digital trunked radio system, part of a larger project dubbed "Public Safety 2000." Issues with vendors, among other problems, had stalled the progress. But if the \$150 million project continues to go as planned, the county's 9-1-1 dispatch facility will officially come online from the new public safety communications center (PSCC) on April 13.

Steve Souder, the center's director, says the new facility will be the largest in the state, and will be among the most technically advanced in the nation. It has been under construction for about two years.

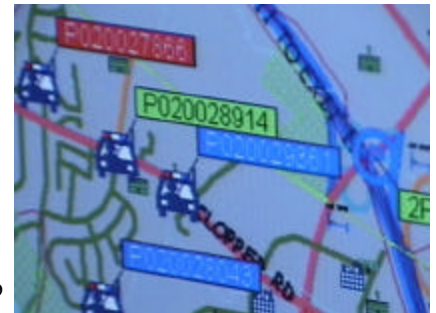
The new dispatch facility, at 1300 Quince Orchard Boulevard in Gaithersburg, occupies an L-shaped room, about five times larger than the existing center at 120 Maryland Avenue in Rockville. Police dispatchers will be on one side, fire/EMS dispatchers on the other, with 9-1-1 call-takers in the center. The PSCC's lower floor includes rooms with racks of electronics for the computer-aided dispatch (CAD), mobile data computers (MDC), fiber and phone networks.

When the facility opens, it promises to offer some of the most sophisticated technology available to the emergency services. The locations of patrol cars and fire/EMS apparatus will be superimposed over GIS maps with important data including contours for most every building in the county and fire hydrant locations.

The county's new traffic management center (TMC) and emergency operations center (EOC) are under construction near the same room where the dispatchers and call-takers will sit. The goal will be to allow both PSCC and TMC the ability to access the county's and state's 2000 traffic cameras and traffic sensors.

Integrating TMC's network of sensors with the CAD is a long-term goal several years away. At least in theory, the computer-aided dispatch (CAD) system will eventually be

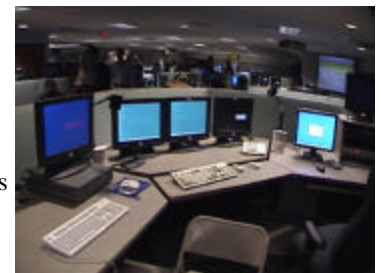
connected to these sensors, as well as the automatic vehicle location (AVL) system that displays locations and incident numbers for police and fire/EMS vehicles and their calls. The Altaris CAD system will combine that info to help make the best dispatching decisions.



The fixed cameras that TMC is installing throughout the county, by the way, are part of an experimental vehicle sensing system. TMC continues to use pan-tilt-zoom cameras for viewing traffic conditions.

The county's MDC system operates either off a county-owned RD-LAP radio network (independent of the trunked system), or a commercial mobile data network (Verizon CDPD). MDC units are configured on RD-LAP or CDPD, but will be unable to roam across both networks. Normally, vehicles used for prisoner transport and investigative purposes will use CDPD, while those users who rarely travel out of the county will be configured for RD-LAP.

The police will have about 16 dispatch positions and the fire/EMS dispatchers will have eight. Each position includes video displays for the Altaris CAD, Motorola's 911Centracom Elite radio console and AltarisView 4.0 AVL mapping system using GIS map data. Call-takers use a Vesta automatic call distributing (ACD) system to process incoming emergency calls and send them to the proper dispatchers over the center's Windows NT-based network.



The county fire/EMS will continue to simulcast dispatching on channel 2, 154.16. 153.95, channel 1, may simulcast the OPS

talkgroup on the trunked system under normal circumstances. But 153.95 will become a flexible patch a dispatcher could move to another talkgroup as needed to link units that only have VHF radios (such as the medevac helicopters) into the trunked system.

When fire/EMS dispatching moves to the new PSCC, listeners should notice improved reception on 154.16 and 153.95, as they have been upgraded to a 10-site simulcast system for both channels.

Special thanks to Joe Bradley, and Lt. Dallas Lipp (PS2000 manager) for information they provided; and to Bob Pugh for his photographs.

The system has 11 800 MHz sites with two additional infrastructure sites, the Emergency Communications Center (ECC) and Alternate ECC (AECC). The 11 transmit sites are as follows:

PS-2000 800 MHz SITES:

- Dickerson Power Plant
- Quince Orchard PEPCO site, Germantown
- Montgomery College, Germantown
- WSSC Shady Grove
- NRC, Rockville
- County Correctional Fac, Clarksburg
- Kenwood, Bethesda
- PEPCO Substation 17, Takoma Park
- Berkshire Towers, White Oak
- Hampshire Green, Spencerville
- Penn Shop Road, Damascus

The trunked system consists of 20 channels. The system's four control channels are 868.6875, 868.8625, 868.8875 and 868.9375. The 16 voice channels are: 866.2125, 866.275, 866.3375, 866.4875, 866.65, 867.8375, 867.8875, 867.9125, 868.1125, 868.1625, 868.275, 868.3625, 868.3875, 868.4375, 868.6125 and 868.6375

The county has five fire/EMS talkgroup fleetmaps which vary somewhat depending upon the radio model and where the radio is assigned.



Below is a general breakdown by zone and use. In addition, fire investigators and NIST fire/EMS have their own fleetmaps. The zone sequence for zones 0 (zero) through 4 and 6 are the same as those used by D.C. and Virginia fire departments.

Zone	Use
0	D.C. Fire
1	Arlington County
3	MWAA (Nat'l/Dulles airports)
4	Fairfax County
5	P.G. County
6	Loudoun County
7	M.C. Main
8	M.C. Alternate
9	M.C. EMS
10	M.C. Hospitals
11	M.C. Major Incident
12	M.C. Coordination
13	COG/RINS (mutual aid chs)
14	Howard County
15	Frederick County
16	Carroll County
17	Administrative
18	M.C. Police (RX only)
N	NIST (selected radios)

The primary Montgomery County fire/EMS zones (7 and 8) as well as the police zone programmed into fire/EMS radios as zone 18 are listed below in detail.

The county's fire talkgroup plan allows for up to six incidents using six sets of four talkgroups. Each set includes three talkgroups and an announcement talkgroup (ATG) that simulcasts across all four.

Unlike the Uniden scanner, Motorola radios can simultaneously monitor the current talkgroup as well as an announcement talkgroup. A dispatcher or fire chief using ANN10, for example, could simultaneously give the order to evacuate the area to firefighters who are using INC10, and an EMS sector that has been established for the same incident on INC11.

The talkaround channel (channel positions 7-O and 8-O) is actually RINS-3 (COG-3).

Zone 7 (primary)

DEC	HEX	Use
3344	0D1	7A Disp
3376	0D3	7B Ops
3408	0D5	7C Inc 10
3440	0D7	7D Inc 11
3472	0D9	7E Inc 12
3504	0DB	7F Ann 10
3536	0DD	7G Inc 20
3568	0DF	7H Inc 21
3600	0E1	7I Inc 22
3632	0E3	7J Ann 20
3664	0E5	7K Inc 30
3696	0E7	7L Inc 31
3728	0E9	7M Inc 32
3760	0EB	7N Ann 30
		7O FDTA (867.2375/156.7)
3376	0D3	7P Ops

Zone 8 (alternate)

DEC	HEX	Use
3344	0D1	8A Disp
3376	0D3	8B Ops
3792	0ED	8C Inc 40
3824	0EF	8D Inc 41
3856	0F1	8E Inc 42
3888	0F3	8F Ann 40
3920	0F5	8G Inc 50
3952	0F7	8H Inc 51
3984	0F9	8I Inc 52
4016	0FB	8J Ann 50
4048	0FD	8K Inc 60
4080	0FF	8L Inc 61
4112	101	8M Inc 62
4144	103	8N Ann 60
		8O FDTA (867.2375/156.7)
3376	0D3	8P Ops

Zone 18 (police monitor in fire/EMS radios)

DEC	HEX	Use
14736	399	18A D1 Rockville Dispatch
14832	39F	18B D2 Bethesda Dispatch
14928	3A5	18C D3 Silver Spring Dispatch
15024	3AB	18D D4 Wheaton Dispatch
15120	3B1	18E D5 Germantown Dispatch
15216	3B7	18F D6 Gaithersburg Dispatch
16240	3F7	18G TP 1 (Takoma Park)
16624	40F	18H RCPD 1 (Rockville City)
16432	403	18I GCPCM (Gaithersburg)
17104	42D	18J CCVP 1 (Chevy Chase Village)
16976	425	18K PKPD (Md Park)

###

NEW CHANNELS, CHANGES FOR P.G. FIRE/EMS

Prince George's County began programming its fire/EMS radios with a new channel plan in February. When finished, fire, EMS and command portables will each have access to a slightly different set of channels.

The new fire simplex tac channels programmed into the department's HT1000 handheld radios appear below. Only command portables will have police channel 6, 494.8875, which will allow for communication with the police and for administrative chitchat. Mobile radios may not get the new channels because of their age and complications adding channels to the Syntor radios (cost prohibitive).

Although the south-county upgrade has not yet been completed to improve reception, the snow in February was supposedly the catalyst that pushed the county into its new channel usage (noted below). Modifications are possible. This plan provides for a second EMS dispatcher, although both EMS channels may be combined in the event of staffing shortages or during slow periods. Channel 3/5 and 4/6 will be used for calls that require a

battalion chief, such as gas leaks in structures or structure fires. The north division includes the 1st and all of the even battalions (1, 2, 4, 6 and 8). The south includes the odd battalions 3, 5 and 7 with the exception of the 1st. This is subject to change.

- 495.0125r Ch. 1 Dispatch/Local Alarms
- 494.8375r Ch. 2 EMS Ops North
- 494.7875r Ch. 3 Fireground South
- 495.0625r Ch. 4 Fireground North
- 494.7875s Ch. 5 Talkaround for Ch. 3
- 495.0625s Ch. 6 Talkaround for Ch. 4
- 494.6625r Ch. 7 EMS Ops South
- 494.8875r Ch. 8 Command Ch. (PGPD Ch.6)
- 453.1125s Ch. 9 Tac 9
- 453.4125s Ch. 10 Tac 10
- 453.6125s Ch. 11 Tac 11
- 458.1125s Ch. 12 Tac 12
- 458.4125s Ch. 13 Tac 13
- 458.6125s Ch. 14 Tac 14



Since the county's HT1000s have a 16-channel capacity, portable radios assigned to EMS units will have two additional channels, and two different channels in place of tacs 13 and 14. This will hopefully permit better communication with the EMRC Region V dispatcher. The Med channels continue to be used in the duplex mode (not repeated). So, make certain to monitor the mobile/portable side 5 MHz higher. See the February 1999 CHM for info on EMRC.

- 462.9750d Ch. 13 Call 2 (467.975 mobile/portable tx)
- 463.0000d Ch. 14 Med Ch. 1 (468.000 mobile/portable tx)
- 463.0250d Ch. 15 Med Ch. 2 (468.025 mobile/portable tx)
- 463.1000d Ch. 16 Med Ch. 5 (468.100 mobile/portable tx)

CTCSS tones are 210.7 on the six 453/458 tac channels, 192.8 on the Call/Med channels and 127.3 on the others. Some fire stations have private chitchat channels that will likely be programmed into channels 8, 15 or 16.



Motorola has provided the county with a proposal for an eight-site 800 MHz radio system which the county is said to be seriously considering. This could possibly be linked to a UHF-T band trunked system. This dual-band trunked system had been proposed several years ago but never received necessary funding. Law enforcement would likely be on the UHF-T band, and all other county users would be on the 800 MHz system.

Thanks to Scott Glazer and others for helping compile this information.

###

**HOWARD COUNTY FIRE/EMS
800 MHZ SYSTEM**

Howard County began re-programming its handheld 800 MHz fire/EMS radios during February. The department also issued an additional 100, for a total of almost 200 portable radios. Each ambulance will have two portable radios (except for 96 and 116); each pumper will receive three; each special service will get four, Rescue 5 will have two; and each volunteer chief officer will have one portable.

The radios were also re-programmed. Changes include the ability to page Howard County General Hospital and a "knox box" activation talkgroup in several zones. The "knox box" is a storage device for controlling access to building keys.

Installation of mobile radios started in February as part of the pilot program. Motorola is reportedly investigating the varying volume levels, which has been a complaint from some users.

The District had licensed 10 856-861 MHz channels that were eventually awarded to Howard County after the county challenged the city because of their lack of use. They are: 856.2375, 857.2375, 858.2375, 859.2375, 860.2375, 856.7375, 857.7375, 858.7375, 859.7375 and 860.7375. Howard, however, reportedly had difficulty coordinating them for use on a countywide basis. Initially in May, these 10 channels were the trunk's only channels.

But the trunked system was later switched to 10 866-869 MHz channels (866.0375, 866.0625, 866.3875, 866.5375, 866.575, 866.6875, 866.9625, 866.9875, 867.1125 and 868.0625). On last check, however, 857.7375 remained in use by the system. 867.6375, 867.8 and 868.0375 are also coordinated for use by Howard County.

Like Montgomery County, Howard County has several different fire/rescue talkgroup templates depending upon the radio. Below is the common zone structure followed by the primary fire and fire incident zones. The fire/EMS talkaround freqs (positions 14 and 15 in the first five zones) are 868.5125/156.7 which is RINS-1 (COG-1) and 866.8375/156.7 which is RINS-2 (COG-2). Thanks to Mark Grutzmacher for his assistance with this information.

Zone Name

- A Main
- B Incident 1
- C Incident 2
- D Incident 3
- E EMS
- F Chat
- G Staff
- H Anne Arundel County/BWI

- I Baltimore County
- J Carroll County
- K Frederick County
- L Montgomery County
- M Montgomery County
- N Baltimore City
- O ITAC RINS/COG (mutual aid chs)
- P Prince George's County
- S Howard County Coord

This talkgroup lineup is subject to change somewhat with the new portable re-programming.

Zone A Talkgroups (main)

- | Dec | Hex | Usage |
|-------|--------|---------------------------|
| 11216 | 2BD A1 | FDSP 1 (154.25 simulcast) |
| 11248 | 2BF A2 | FIRE 1 |
| 11280 | 2C1 A3 | EMS 1 |
| 11312 | 2C3 A4 | HCGH |
| 11856 | 2E5 A5 | FDSP 2 |
| 11888 | 2E7 A6 | FIRE 2 |
| 11920 | 2E9 A7 | EMS 2 |

Zone B Talkgroups (incident 1)

- | | | |
|-------|--------|---------------------------|
| 11344 | 2C5 B1 | FIC 10 (154.22 simulcast) |
| 11376 | 2C7 B2 | FIC 11 |
| 11408 | 2C9 B3 | FIC 12 |
| 11440 | 2CB B4 | FIC 13 |
| 11472 | 2CD B5 | FIC 14 |
| 11504 | 2CF B6 | FIC 15 |
| 11536 | 2D1 B7 | FIC 19 |

Zone C Talkgroups (incident 2)

- | | | |
|-------|--------|----------------------------|
| 11568 | 2D3 C1 | FIC 20 (154.175 simulcast) |
| 11600 | 2D5 C2 | FIC 21 |
| 11632 | 2D7 C3 | FIC 22 |
| 11664 | 2D9 C4 | FIC 23 |
| 11696 | 2DB C5 | FIC 24 |
| 11728 | 2DD C6 | FIC 25 |
| 11760 | 2DF C7 | FIC 29 |

Zone D Talkgroups (incident 3)

- | | | |
|-------|--------|--------|
| 11972 | 2E1 D1 | FIC 30 |
| 12004 | 2E3 D2 | FIC 31 |
| 12036 | 2E5 D3 | FIC 32 |
| 12068 | 2E7 D4 | FIC 33 |
| 12100 | 2E9 D5 | FIC 34 |
| 12132 | 2EB D6 | FIC 35 |
| 12164 | 2ED D7 | FIC 39 |

Police Dispatch Talkgroups

- | | | |
|-------|-----|------------------------------------|
| 17616 | 44D | Police 1 North (159.09 simulcast) |
| 17680 | 451 | Police 5 South (155.115 simulcast) |

###

WORCESTER COUNTY GOES TRUNKED

by Robert Korb, Jr (rob@korb.cc)

Maryland's Worcester County borders the Atlantic Ocean from Delaware to Virginia and is home to the state's second-most-populated city during the summer, Ocean City. The county's public safety sector includes 10 volunteer fire departments, the fire marshal's office and sheriff's department as well as five municipal police departments, Berlin, Snow Hill, Ocean Pines, Pocomoke, and of course, Ocean City.



The county's Department of Emergency Services has upgraded the county's existing and outdated radio systems. The county's commissioners selected an M/A-Com (formerly Ericsson/GE) three-site 10-channel Pro-Voice GPS-simulcast radio system.

The county's 800 MHz EDACS system supports analog and digital voice transmissions. Some law enforcement users have digital talkgroups but the majority of the system is analog. The system is compatible (or patchable) with surrounding jurisdictions' radio systems. These include Wicomico County (Motorola analog Type II), Sussex County (Motorola Astro), Accomac County (conventional VHF), Somerset County (conventional VHF), and Ocean City (EDACS).

The Ocean City and Worcester County EDACS systems each operate on their own set of channels. But radios may switch between systems with the press of a button. Several "wide-area" talkgroups simulcast on both systems and are noted below.

If Ocean City users were to lose contact with the Ocean City tower, the units can switch systems and access the "wide-area" talkgroups operating off the county's tower, and vice versa.

Last February, the county's 9-1-1 center moved from the courthouse basement in Snow Hill to the basement of the newly constructed Worcester County Government Center. The new 9-1-1 center features five C3 Maestro Windows NT-based dispatch consoles and five Orion backup desktop control stations.

In July, the county completed towers at three sites chosen by M/A-Com engineers which should provide guaranteed 95 percent coverage (tests were conducted in October). The outdoor and indoor coverage testing wrapped up two days early because of greater-than-anticipated performance results.

The northern part of the county has a 300-foot tower at the Berlin MSP barrack. A 345-foot tower was erected in the middle of the county at the Newark landfill, and a 250-foot

tower was built in the south at Klej Grange just outside of Pocomoke.

Fiber optics connect the 9-1-1 center to an existing water tower in Snow Hill. A microwave link then connects the Snow Hill tower to the county's other three towers. Microwave also links Ocean City to Worcester County's tower in Berlin.

The county purchased the Jaguar 700P, Jaguar 700P Pro Voice and LPE 200 portable radios for public safety as well as the 300P portable radio for non-public safety users. Supervisor radios feature keypads for individual calling. As for mobile radios, the county selected the Orion which will also be used for desktop control stations or as a base station. The county's fire departments were promised a one-for-one exchange for their existing low-band equipment. The cost was estimated at around \$3 Million.

Other departments not involved with public safety, who had previously used their own radio systems, such as transportation, landfill, water, planning, animal control and the state attorney's office, also plan to migrate to the trunked system, if not already on it. Joining all of these agencies together in a single system allows for flexible communication that has never existed in the county.

Ocean City's EDACS system remains independent of Worcester County's, with the exception of the linked talkgroups. Last year Ocean City moved its primary EDACS site to a 340-foot tower behind the Public Safety Building on 65th Street.

The primary site had been the Ocean Pines tower, which remains a "hot backup" site. A Nextel site in Ocean City had been blamed for desensing the city's EDACS radios, and that was the reason for moving the tower five miles into town. While this move eliminated the dead spots near the center of town, overall coverage has reportedly decreased.

As for the county's smaller municipal police departments, Ocean Pines and Berlin have switched from the Ocean City system to the Worcester County system, so they will no longer reimburse Ocean City for system usage. Some of the municipal departments used the conventional mutual aid channels and the last three LCNs (9, 10 and 11) from Ocean City's Ocean Pines' site (860.7375, 856.2375 and 857.2375) while the county's system was being built.

For those who run ETRUNK, Ocean City's 65th Street tower is EDACS site 1, O.C.'s Ocean Pines' tower is site "A" (10). The county's system is site 7.

Installation started last summer. The county commissioners accepted the system on November 19, and all agencies are scheduled to complete the transition by spring 2003. All departments with the exception of the fire service are

currently operating on the trunked system. The fire service has not switched because of a shortage of portable radio chargers from the manufacturer. Pocomoke fire went online during March. The remaining VFDs should be on by May 1. Existing low-band two-site paging on 46.38 will continue to alert firefighters of incidents. Future upgrades are planned to move from the two-site low-band paging system to a central single-site (Newark) VHF high-band system.

Logical channel numbering for county frequencies:

855.9625 LCN01
856.4625 LCN02
857.4625 LCN03
857.7125 LCN04
858.4625 LCN05
858.7125 LCN06
859.4625 LCN07
859.7125 LCN08
860.4625 LCN09
860.7125 LCN10



TALKGROUPS (freqs in parenthesis are simulcasts/patches)

Wide-Area

A-F-S - DEC - HEX Usage
02-021 - 0273 - 111 OCPD2 - Ocean City PD Main (460.325)
02-041 - 0289 - 121 FD/EMS - OC Fire/EMS Disp (158.895)
02-042 - 0290 - 122 FDO1 - OC Fire/EMS Ops 1 (154.085)
06-021 - 0785 - 311 WCSO1 - County Sheriff Dispatch
06-081 - 0833 - 341 MSP1 - Maryland State Police 1
07-062 - 0946 - 3B2 FD Disp - Co Fire/EMS Disp (46.38)
02-125 - 0357 - 165 Coord 3 - Coordination 3

Fire Service

07-141 - 1009 - 3F1 FM 1 - County Fire Marshal
07-142 - 1010 - 3F2 FM 2 - County Fire Marshal Talkaround
07-062 - 0946 - 3B2 FD OPS 1 - Fire Dept Ops North
07-063 - 0947 - 3B3 FD OPS 2 - Fire Dept Ops Central
07-064 - 0948 - 3B4 FD OPS 3 - Fire Dept Ops South
07-065 - 0949 - 3B5 EMS OPS 1 - EMS Ops North
07-066 - 0950 - 3B6 EMS OPS 2 - EMS Ops Central
07-067 - 0951 - 3B7 EMS OPS 3 - EMS Ops South
07-073 - 0955 - 3BB Spec Ops - Special Operations
06-045 - 0805 - 325 Trooper - Medevac Operations (39.18)
07-071 - 0953 - 3B9 Fire Pol - County Fire Police
07-105 - 0981 - 3D5 AGH - Atlantic General Hospital
07-106 - 0982 - 3D6 PRMC - Peninsula Regional Med Center

Police

07-070 - 0952 - 3B8 FD/PD - Fire / Police Dept Talkaround
07-041 - 0929 - 3A1 BPD 1 - Berlin Police Dispatch
07-021 - 0913 - 391 OPPD 1 - Ocean Pines Police Dispatch
06-024 - 0788 - 314 CBI CR - Criminal Bur of Investigations
06-061 - 0817 - 331 WCJ 1 - Worcester County Jail

Mutual Aid (Police & Fire)

07-101 - 0977 - 3D1 Accomac - Accomac County
07-102 - 0978 - 3D2 Sussex - Sussex County
07-103 - 0979 - 3D3 Somerset - Somerset County
07-104 - 0980 - 3D4 Wicomico - Wicomico County

Miscellaneous

09-041 - 1185 - 4A1 EMERG - County Emergency Channel
09-042 - 1186 - 4A2 Coord 1 - Coordination 1
09-043 - 1187 - 4A3 Coord 2 - Coordination 2
07-092 - 0970 - 3CA Train 1 - Training Channel 1
07-093 - 0971 - 3CB Train 2 - Training Channel 2
08-021 - 1041 - 411 CO ADM - County Administrators
08-041 - 1057 - 421 PW SUPV - Public Works Supervisors
08-042 - 1058 - 422 PW ADM - Public Works Administrators
08-061 - 1073 - 431 LFILL 1 - Landfill 1
08-062 - 1074 - 432 LFILL 2 - Landfill 2
08-141 - 1137 - 471 CO RIDE 1 - County Ride 1
08-142 - 1138 - 472 CO RIDE 2 - County Ride 2
08-081 - 1089 - 441 ROADS 1 - County Roads 1
08-082 - 1090 - 442 ROADS 2 - County Roads 2
08-101 - 1105 - 451 MAINT 1 - County Maintenance 1
08-102 - 1106 - 452 MAINT 2 - County Maintenance 2
09-021 - 1169 - 491 DRP 1 - Dept of Review & Permitting 1
09-022 - 1170 - 492 DRP 2 - Dept of Review & Permitting 2
09-001 - 1153 - 481 PARKS 1 - State Parks 1
09-002 - 1154 - 482 PARKS 2 - State Parks 2
07-121 - 0993 - 3E1 EM SER 1 - Emergency Services 1
07-122 - 0994 - 3E2 EM SER 2 - Emergency Services 2

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HARFORD COUNTY BUILDS TRUNKED SYSTEM

Harford County signed a \$23 million contract with Motorola in August for a Motorola Astro Smartnet digital system linked by a Tadiran microwave network. Users will include the county's fire/EMS, sheriff, and Aberdeen, Havre de Grace and Bel Air police. Maryland State Police, FBI and the Army at Aberdeen intend to access the system as well. Three new towers are included in the project. Plans include mobile data, automatic vehicle location (AVL) and fire siren control. The system is targeted to be operational during mid-2004 and completed about a year later.

As an interesting side note, the county's volunteer firefighters had used Motorola Minitor II pagers for alerting for 15 years, but switched to US Alert Nova pagers.

The county has so far coordinated nine 800 MHz channels, which include two that are conditional. They are: 866.25, 866.2875, 866.775, 867.2875, 867.3625, 867.7875, 868.375, 868.775 and 868.8125.

Thanks to Lewis McCannon for keeping us updated on the county's progress.

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CHARLES COUNTY PURCHASES TRUNKED SYSTEM

A contract with Motorola was signed on October 28, at which point the county was planning for a total switch over within 18 months. The system could be all APCO P25 digital.

The 9-1-1 center should move into its new and larger communications facility this summer. The new center is about four miles from the old one, on Audie Lane off Radio Station Road in La Plata. This is near the old Army radio station tower and fire low-band transmitter site.

Charles County has coordinated eight 866-869 MHz channels. The regional coordination committee has cleared three channels for use. They are 866.325, 868.65 and 868.9. The remaining five channels, 866.625, 867.05, 867.45, 868.675 and 868.925, are pending final approval. See the August 2001 newsletter for more details.

###

CECIL COUNTY CONSIDERS VHF TRUNKED SYSTEM!

Cecil, Maryland's northeastern-most county, proposes building a VHF splinter-channel trunked radio system. One of the few other VHF trunked systems in the area is what Virginia is considering. Cecil county has not yet selected a trunking format nor manufacturer, according to one of the county's technicians. But several frequencies are pending FCC approval.

The base frequencies pending approval are: 154.1375, 154.3325, 154.4075, 154.8825, 154.9275, 155.0025, 155.6025, 155.7525 and 155.9325. Mobile frequencies are: 154.0625, 154.9425, 155.3175, 158.7225, 158.8575, 158.8725, 158.9625, 159.0075, 159.0975, 159.1125, 159.1275 and 159.1575. 155.475 has also been licensed, presumably for use with the national law enforcement emergency network.

The three sites tentatively selected are on Irish Town Road in North East, 129 East Main Street in Elkton (Emergency Services complex) and Bohemia Avenue in Cecilton.

###

KENT COUNTY'S FIRE/EMS CHANNEL PLAN

Many thanks to Chip Campbell for coming through with Kent County, Maryland's VHF high-band channel plan. Dispatch and alerting continue on 33.98, and responding units select fire 1, 2 or 3 depending on their location. Portable radios feature a toggle switch which allows users to select between talkaround (A) and repeater (B) modes.

OUTPUT (INPUT)	[TONE]	Usage
154.1975 (150.7825)	[203.5]	F1: Fire 1; Cos. 2, 7
155.1675 (158.8725)	[141.3]	F2: Fire 2; Cos. 4, 5, 8
154.2425 (155.9925)	[136.5]	F3: Fire 3; Cos. 3, 6
153.7700 (153.7700)	[d152]	F4: Fire Ground 1
153.8900 (153.8900)	[d152]	F5: Fire Ground 2
154.0100 (154.0100)	[d152]	F6: Fire Ground 3
154.0700 (154.0700)	[d152]	F7: Fire Ground 4
154.1975 (150.7825)	[203.5]	F8: Fire 1A (131.8 tx tone)
155.1675 (158.8725)	[141.3]	F9: Fire 2A (94.8 tx tone)
154.2425 (155.9925)	[136.5]	F10: Fire 3A (85.4 tx tone)
154.8300 (154.8300)	[None]	F11: Fire Police [port only]
153.9500 (153.9500)	[None]	F12: Fire PAC Activate (d152 tx tone) [port only]
153.9500 (153.9500)	[None]	F13: Fire PAC Non-Activate [port only]
154.2800 (154.2800)	[None]	F14: Fire Mutual Aid 1
154.2650 (154.2650)	[None]	F15: Fire Mutual Aid 2
158.8200 (156.0150)	[d243]	F16: County Government

###

CUSTOMS EXPANDS AIR PROTECTION OVER CAPITAL



Monitor Combat Air Patrols over the 'net

Scanner listeners have been monitoring the combat air patrols (CAP) since September 11. But now we have a new player over Washington buzzing the airwaves. The U.S. Customs Service Air and Marine Interdiction Division recently assumed an expanded role in guarding the country against terrorist attacks, with air patrols over the Nation's Capital.

Traditionally, the Air and Marine Interdiction Division was assigned the task of protecting the nation's borders from illicit drugs and other contraband destined for the United States. That mission continues.

Customs Service aircraft enforced airspace security during the 2002 Winter Olympics in Salt Lake City and helped hunt for the two sniper suspects. Customs flies Blackhawk helicopters and P-3 aircraft. They often identify as "Omaha" on 282.425, known as "Customs Blue 1."

Also keep an ear on 123.025 which has become a common channel for public safety helicopters in the Washington-Baltimore area. 165.2375 is often used by ground-based Customs agents. Try the DCA ATC freqs for related chatter:

125.65, 126.55, 119.1, 119.85, 124.2 and 118.95.

If you just don't receive the CAPs well, or live outside the area, Mark Knowlton is providing a RealAudio feed of CAP comms from one of his scanners. He gets such good reception because he has his Bearcat 780XLT connected to a Bogner 6db UHF antenna mounted 100-feet up and uses half-inch hardline. Mark says the feed will stay in place of his Baltimore police simulcast for the foreseeable future. CAP frequencies he pipes onto the Internet include 324.0 (main CAP coordination freq), 141.75, 320.6 and 252.775. Also try 143.8 (Hill AFB F-16s TDY to Langley), 139.9 and 234.6 (all AM). You can e-mail him (nightwatch@comcast.net) and read about and monitor his site at:

<http://groups.msn.com/scanmilairdcbalt/homepage>
<http://www.shoutcast.com> search for "scan mil/air"

Also try CHM and the Southern MD Scanner Forum links:
<http://henney.com/chm/links/dclatah.htm#RADIO>
<http://groups.yahoo.com/group/SouthernMDSscannerForum/>

###

INTRODUCING THE DC EMERGENCY RADIO NETWORK

The DC Emergency Radio Network (DCERN) promises to be available as an alternate means of communication during an emergency. DCERN uses 462.5625, that's family radio service (FRS) channel 1 (carrier squelch). The group's Website, www.dcradio.org, says if we suffer a terrorist attack, power outage, storm or other problem, DCERN can be a pre-planned way of communicating neighborhood news and information.

Bill Adler, Jr., president of Adler & Robin Books, and a Washington writer is the man behind DCERN. You can e-mail him at: dcern@adlerbooks.com or call 202-986-9275. Read more about him at: <http://www.adlerbooks.com/whowho.html>

###

ULTIMATE LIST OF SCANNER LINKS NOW ONLINE!

Having trouble finding that scanner-related Web link, or looking for details on a particular model scanner, or can't remember that Web page on which you saw the Montgomery County police codes? Try visiting Mike Agner's Web pages of links (henney.com/chm/links). You'll find links to radio sites relevant to our region thoughtfully organized by topic. Many thanks to Mike for his super work!

###

WHERE HAS ALAN BEEN?

It's been a rough year for my mother and me. In my years of scanner listening, I never ever expected to hear over the scanner my own father taken to the hospital in cardiac arrest. Dad had been in perfect health, which makes his death hard to accept. He came to my room to pickup the cell phone before departing for the grocery store. He was only going to drop off a couple prescriptions for my mom, and pick up some groceries -- just as he had done many times before. Frequently I had gone with him shopping, and I frustrated myself that I did not accompany him this trip. There must have been something I could have done, although I don't know what.

The phone rang at 4:27 p.m. It was my dad trying to speak. I could not understand a word he was trying to say. A woman, who I later learned was a nurse, came on the line, said my father collapsed in the parking lot, was having trouble breathing and an ambulance was on the way. She later told me she saw him collapse in the parking lot, went in the store to summon help, and returned with the security guard and a grocery store worker. Dad couldn't even dial the phone, although he could give them our number.

I grabbed my backpack in which I carry an AED -- as I had always feared an emergency like this -- and headed to the Shopper's. I arrived a couple minutes after the Chillum ambulance at the shopping center which is at the edge of P.G. County. When the ambulance crew arrived, my dad's condition deteriorated rapidly -- shallow pulse, low blood pressure, trouble breathing, and unconsciousness. He went into cardiac arrest shortly after being loaded into the ambulance. Just as I had arrived, the ambulance crew pulled out its AED, and that's when they pushed me back and closed the doors.

Several minutes passed before the medic from Silver Spring arrived. The paramedic crew transferred its gear into the back of the Chillum ambulance, spent several minutes working on my dad, then left for the hospital. What little information I gathered pertaining to his condition was what the medic provided for the hospital over the radio. I had hoped to hear a miracle. I didn't. My dad, the 70-year-old working code, was going to Washington Adventist Hospital. He was one of the best friends I ever had. Part of me was dying.

I quickly exchanged contact information with the nurse and security guard so we could write them a note of appreciation and rushed home after they helped load dad's groceries in the car. I picked up my mom and her physician friend who is one of our neighbors, and we headed to the hospital.

After arriving in the emergency room, we were moved into the "quiet room" where we waited for the bad news. Although we were kept out, our doctor friend was present while the hospital staff tried to revive my dad. She was a great comfort. He was a perfect candidate for a "save" since the cardiac arrest was witnessed by the ambulance crew, who had already provided him with an oxygen supply and had

applied the AED within two minutes of cardiac arrest, then performed CPR until the medic arrived.

According to hospital records, for 16 minutes the E.R.'s cardiac monitor showed that my dad repeatedly alternated between pulse-less electronic activity (PEA) and ventricular tachycardia (VT). Resuscitation efforts ceased at 5:11 p.m. The emergency room physician speculated that dad suffered an intracranial bleed or stroke.

What made his death so hard to accept was the fact that dad had been in perfect health, except for a knee problem. We couldn't see any use spending several thousand dollars for an autopsy. But on my own, I requested copies of his records, from the hospital, ambulance and medic. In addition, I obtained the 9-1-1 response times for both Prince George's and Montgomery counties.

It was frustrating to learn that it took P.G. County 3 minutes and 5 seconds to receive, process and dispatch the call. The security guard told me they called 9-1-1 a second time while waiting for an ambulance to arrive. Even worse, since this required a mutual-aid response from Montgomery County, Montgomery County spent another minute and 25 seconds in the dispatch process after receiving the request from P.G. for the Silver Spring medic unit.

According to records from P.G. County, the Silver Spring medic arrived more than 11 minutes after the call was received by P.G.'s 9-1-1 center. More than 40 percent of the time it took to get the medic to the scene was lost in the dispatch process between the two counties.

The dispatch process in P.G. County is often complicated. In my dad's case, the call-taker entered and sent the run to a fire/EMS dispatcher in 17 seconds (no pre-arrival instructions were provided). It was classified as a "99-V" (CAD-speak for a serious medical emergency).

The fire/EMS dispatcher typically checks the queue for duplicate entries, contacts the fire stations due on the call, and approves the call. If a piece of apparatus recommended by the CAD system is suddenly understaffed or otherwise unavailable, the dispatcher must query the CAD system and contact another station, thus adding dispatch delays for pending emergencies. To further complicate matters, minimum staffing in local dispatch centers, such as P.G., is challenging to maintain.

Would a couple minutes have made a difference in dad's case? Maybe, maybe not. But that isn't my point. It should not take more than a minute to dispatch a high-priority EMS call. The frustrating part is that delays for dispatching EMS and fire calls are not uncommon, and have become tolerable. I wrote an e-mail to Gary Allen from the *Dispatch Monthly Magazine*. He said in his experience, the entry-to-dispatch phase should take no more than 45 seconds.

I've written several letters to county officials expressing my concerns regarding dispatch delays. In one written response, I

was told that the three-minute dispatch time was "... within established standard operating procedures." Officials failed, however, to tell us about a recent county policy that requires fire and EMS calls to be dispatched within two minutes or else the dispatcher must explain in writing at the end of the shift why it wasn't.

Hopefully dispatch processes improve. The county, after all, has a relatively new 9-1-1 center with new CAD software. It's as if our society, with all of its technology, has lost the ability to complete simple tasks in a timely manner. I can't



imagine sloppy delays like these happening 20 years ago. Since few other families have had access to the information I sought, I hope I can make a difference.

Editor's note: Our condolences to Willard Hardman who lost his mother earlier this year.

###

Please address all correspondence to Alan. We encourage readers to submit material and write articles that relate to the hobby. All submissions are subject to editing for style and content. When submitting material please make certain we can contact you should we have any questions. We welcome frequency and visitor requests, but please include a reply envelope.

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The *Capitol Hill Monitor* is the non-profit newsletter of the Capitol Hill Monitors. The newsletter keeps scanner enthusiasts abreast of local meetings, frequency profiles and other topics of interest. Dues are \$10 and include 12 issues (back issues cost \$1 each). Kindly make checks payable to Alan Henney. Membership will be prorated accordingly in

The Capitol Hill Monitor

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Mark your calendar for April 13!

Montgomery County's new Emergency Communications Center promises to go Live. County public safety will finally operate on the digital trunked system with lots of extras. Details Inside!

