The Capitol Hill Monitor

Volume 18 Issue 1 (2015) January 2015

D.C.'s LAST MEDIA AIRCRAFT

In October, 2012, a single aircraft, N98CL, became the only one responsible for providing aerial observation to D.C. area news outlets. The only other media aircraft in the entire region report for WBAL, WJZ and WBOC.

N98CL is a Bell 206-L4 Long Ranger. The helicopter is owned by Helicopters, Inc. which specializes in leasing helicopters to radio and TV stations. More than 50 news outlets nationwide use the company's services.

N98CL is based out of Laurel, at Tipton Airfield, adjacent to Fort Meade. The helicopter has two crews consisting of a pilot and aerial photojournalist. The helicopter is a 24/7-365 operation with crews on stand-by at all times outside of normal business hours which are 5:15 a.m. to 11:15 p.m. during the week day.

The morning photojournalist, Brad Freitas, regularly posts text and photos to Twitter (@NewsChopperBrad) and Facebook (Chopper Brad). Here's a selfie:

The helicopter was previously used for WCAU-TV in Philadelphia, but has since been repainted dark blue.

In Washington, D.C., the helicopter reports for WRC-TV as *Chopper 4*, WTTG-TV as *SkyFox*, WJLA-TV as *News Chopper 7* and for WUSA-TV as *Sky 9*. Brad also reports for WNEW and Total Traffic Network using a MacBook Air and cell phone. On the aircraft band, the helicopter identifies as "*News 1*."

The helicopter is controlled through a cooperative agreement among the four TV news stations. Each month a different assignment desk, with the exception of WJLA, is responsible for dispatching the helicopter. They rotate: WUSA-WTTG-WRC, in that order.

Primary contact is via the two-way radio (see freqs on next page). When radio fails or if the helicopter flies beyond a certain range, roughly 50 miles, the radios become unreliable and the crew must resort to cell phone.

Video from N98CL is beamed to either WRC (typically in the afternoon/evening) or WTTG (in the morning). WJLA and WUSA lack the sophisticated microwave-tracking receivers. The stations share the video via a fiber-optic circuit.

The helicopter's primary mission is breaking news, although the crew typically provides traffic video for the morning news shows. The rest of the day, the helicopter is available as needed from the hangar.

To track the whereabouts of N98CL, visit the Flightaware website. Vertical Reference is a website for those working in the helicopter service industry with good forums and details.

RELATED FREQUENCIES:
123.0250 Common helo-to-helo freq
134.3500 Washington Tower (helo traffic over D.C.)
153.0500 [331] WRC ENG/Assignment Desk
161.7300 [88.5] WTTG TOC/Assignment Desk
450.0875 [141.3] WUSA ENG/Assignment Desk

"Chopper Brad" may be a guest at the CHM lunch at Ledo's on Jan. 31. He is the on-call photog that weekend but will hopefully join us assuming nothing is breaking; so bring your questions!

SCANNING METROBUS

Monitoring Metrobus can be interesting and informative. With the primary D.C. police, fire/EMS channels now encrypted, the bus chatter often provides valuable insight as to what is happening on the streets. Listeners also have an appreciation of what it is like to be a bus driver in Washington, D.C.

Drivers are often notified when authorities block traffic. With a fleet of more than 1500 buses covering 1500 square miles, the buses are frequently caught in the middle of the action.

Metrobus is the country's sixth busiest bus agency. Together with Metrorail, they provide service to a population of about 5 million people.

Metrobus provides more than 400,000 trips each weekday serving 11,500 bus stops in D.C., Maryland and Virginia along 325 routes.

The Metrobus system is managed using a computer-aided dispatch (CAD) system designed by Clever Devices. The CAD system manages calls to and from the buses. So the bus drivers (known as operators) do not decide what talkgroup they use.

Instead, the Metrobus communications center uses the CAD system and radio system to chose a channel they will operate on. The specialist (dispatcher) selects from one of nine bus divisions (also known as garages, yards, etc.) they will monitor and the specialist monitors routes associated with that garage.

When a specialist needs to call a specific bus, he/she will use the CAD system to establish the call. The CAD system will open one of the "BUS" talkgroups and alert the bus driver via the display unit.

Bus drivers also have a "request-to-talk" and "priority-request-to-talk" buttons on their display unit which sends a text message to the communications center and the dispatcher monitoring the route.

The primary talkgroups used by the CAD system are Bus 01 to 08. Originally these BUS channels were independent talkgroups assigned to each bus division.

The channels are now in the process of being remapped to allow for more channels for buses and more specialists. The "Analog Incident" and "Bus Maintenance 2" groups are included in the CAD.

WMATA Motorola trunked system (ID# 8209-Site 1)
Control Chs: 490.7875, 490.8625, 496.4375, 496.5375
Base freq: 489.0875; Step: 25.0 KHz

Hex	Uniden	TGID	Use
065	1616	BUS-01	Bus Dispatch 1
067	1648	BUS-02	Bus Dispatch 2
069	1680	BUS-03	Bus Dispatch 3
06B	1712	BUS-04	Bus Dispatch 4
06D	1744	BUS-05	Bus Dispatch 5
06F	1776	BUS-06	Bus Dispatch 6
071	1808	BUS-07	Bus Dispatch 7
073	1840	BUS-08	Bus Dispatch 8
075	1872	BUS-INCA	Bus Incident Analog*
077	1904	B-MNT1	Bus Maintenance 1
079	1936	B-MNT2	Bus Maintenance 2*
07B	1968	RADIO-A	Radio Techs Analog
089	2192	BDP-AN	Bus Disp Annce Gr.
0A1	2576	B-TEST	Bus Test Group
601	24592	B-OPS1	Bus Ops 1 (supervisor)
603	24624	B-OPS2	Bus Ops 2 (alternate)
605	24656	B-INCD	Bus Incident Digital
607	24688	B-SPV1	Bus Supervisor 1
609	24720	B-GRGE	Bus Garage (bridge)
60F	24816	BUS-AN	Bus Announce Grp.
81B	33200	RADIO-D	Radio Techs Digital

The four-digit Uniden talkgroup IDs are analog and the five-digit talkgroups are digital.

The other bus talkgroups function independently of the CAD system. Of especial interest are "Bus Ops 1" (supervisory, incident and reporting) and Bus Bridge/ Snow Desk on the old Garage talkgroup.

There are a few other data channels that Metrobuses use in case there are problems with the cellular-based (AT&T-3G/LTE) data connections. The data channels transmit the AVL, bus health, farebox data, passenger counts, text messages and establish radio calls.

Within the next five years, WMATA plans to migrate to a 700 MHz system. The status of that project is unclear as the request for proposals has not been released.

METROBUS 10 CODES

10-1 In Service
10-2 Out of Service
10-3 Unable to Copy - Change Location
10-4 Affirmative/OK
10-5 Stand by
10-6 Call by Telephone
10-10 Weather Report
10-20 Location
10-30 Accident - Property Damage
10-31 Accident - Personal Injury
10-32 Accident - Fatality
10-33 Accident - Preventable
10-34 Accident - Non Preventable
10-35 Personal Injuries
10-36 Time Check with ____ Division
10-40 Fire
10-45 Rail Delay
10-46 Rail Requesting Bus Service
10-50 Cuts
10-50A Cuts (for Personnel)
10-50B Cuts (for Buses)
10-60 Crippled Bus
10-61 Change Off
10-65 Operator Claims Defective Bus
10-70 Operator Assaulted
10-71 Operator Robbed
10-75 Employee Transported to Lab
10-99 Emergency - Stop All Other Transmissions
10-100 Does not Conform to Regulations and/or Unprofessional Radio Demeanor

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D.C. FIRE/EMS JOINS MPD USING ENCRYPTION

On Dec. 15, 2014 at 9 a.m., D.C. Fire/EMS switched its communication to the city's newer P25 radio network. The new Motorola APX radios feature a modified fire/EMS fleetmap.

The 0 (Zero) zone is no longer the primary zone but remains for interoperability. The primary working zones are now 0A and 0B. They are encrypted with the exception of MAIN and DISP, which are unencrypted.

Zone 0C consists of encrypted talkgroups unique to DCFD radios (not intended for use with other agencies). The 0 (zero) and 0H (hospital) zones are unencrypted.

Montgomery and Fairfax counties have already reprogrammed their fire/rescue radios with the standard encryption key, used by D.C., designated for area fire/EMS use. The chart shows the zones as they appear in their radios. "BLANK" is the VRS (vehicular repeater).

Should D.C. require mutual aid from a jurisdiction that does not have encryption or the new P25 programming, such as Prince George's Co., the 0 (Zero) zone remains unencrypted and simulcast to the old Motorola system.

ZONE/MODE	ZERO	ZERO ALPHA	ZERO BRAVO
1	01 DISP	0A1 DISP	0B1 DISP
2	02 MAIN	0A2 MAIN	0B2 MAIN
3	03 INC10	0A3 INC30	0B3 INC50
4	BLANK	BLANK	BLANK
5	05 INC11	0A5 INC31	0B5 INC51
6	06 INC12	0A6 INC32	0B6 INC52
7	07 INC20	0A7 INC40	0B7 INC60
8	BLANK	BLANK	BLANK
9	09 INC21	0A9 INC41	0B9 INC61
10	010 INC22	0A10 INC42	0B10 INC62
11	011 EMS5	0A11 EMS1	0B11 SOD1
12	012 EMS6	0A12 EMS2	0B12 SOD2
13	013 SPEV1	0A13 EMS3	0B13 SPEV3
14	014 SPEV2	0A14 EMS4	0B14 SPEV4
15	015 DIR2	0A15 DIR2	0B15 DIR2
16	016 DIR1	0A16 DIR1	0B16 DIR1

We are fortunate to have Ron's expertise as he shares his latest, thoughtfully researched, military aircraft frequency list for the region. For his accompanying list of military radio call signs, please see this link.

MONITORING MILITARY AIRCRAFT

by Ron Perron (mdmonitor1-at-verizon-dot-net)

Background: I have been monitoring military VHF/UHF communications in this area for more than 10 years. This frequency list is a product of my own monitoring as well as information posted on various lists by other listeners in the Mid-Atlantic area.

For the most part, military VHF/UHF communications in my area are in the clear in AM mode. I say that, but there have been some instances of military secure/encrypted communications.

A few exceptions come to mind: the US Coast Guard uses voice encryption on some of its discrete VHF nets and several years ago the Maryland Air National Guard airlift unit at Martin State Airport, just outside of Baltimore, used P25 encrypted voice for some of its communications with squadron operations. That unit has since been disestablished. Also, some of the Sierra Nevada Corp. aircraft use secure/encrypted voice comms.

I personally have not heard any secure/encrypted voice communications between aircraft. The USAF does employ a frequency hopping voice system called *Have Quick*. Although not encrypted per se, the frequency hopping aspect of the system makes it difficult to copy and follow communications between aircraft. This system is usually used by AWACS aircraft which operate in the Warning Areas off the Mid-Atlantic coast.

Disclaimer: To my knowledge no classified information is included in this frequency listing.

AAF Army Air Field
AFB Air Force Base
ANG Air National Guard
ArNG Army National Guard
ARTCC Air Route Traffic Control Center
FACSFAC Fleet Area Control & Surveillance Facility
RCAG Remote Communications Air/Ground
TRACON Terminal Radar Approach Control

34.000 Ft Dix NJ range
34.100 Davison AAF Ops/Dispatch
38.400 Fekler AAF Advisory
38.500 Ft A. P. Hill Range Control/advisory
38.700 Felker AAF, Ft Eustis VA
41.350 Ft Dix NJ range & ArNG Ops; JB Mc Guire Dix
46.900 Del. ArNG Ops, New Castle Airport Wilmington
49.720 Virginia ArNG OPS, Richmond VA
52.750 Davison AAF ArNG Ops

118.125 FACSFAC-Giant Killer, Va Capes W386/AR636
118.400 Andrews AFB Tower
118.600 MCAF Quantico VA tower
118.675 Potomac TRACON
118.950 Potomac TRACON
119.100 Ronald Reagan National Airport (KDCA) tower.
119.275 NAS Pax Rvr Area Advisory Ctrl "Bay Watch "
119.425 Salisbury MD (KSBY) tower (used by PAX a/c)
119.300 Potomac TRACON
119.850 Potomac TRACON
120.050 NAS Patuxent River Approach/Departure
121.000 NAS Patuxent River Approach/Departure
121.300 Martin State Airport (KMTN) Tower
121.500 VHF guard (EMERGENCY)
121.675 Washington ARTCC Montebello
121.950 US Naval Academy grd ctrl for spec activities
122.750 Northrop-Grumman Test Facility, Baltimore
123.100 Civil Air Patrol
123.200 Naval Test Pilot School, NAS Patuxent River
123.225 Northrop-Grumman Test Facility, Baltimore
123.225 AMRASS system testing Phillips AAF, MD
123.375 NASA Ops Langley AFB VA
123.400 FAA Ops-Reagan National & Atlantic City
123.400 Alternate for Northrop-Grumman Bal Test Fac.
123.450 Northrop-Grumman Test Facility, Baltimore
123.525 NAS Patuxent River MD AAR discrete
123.700 NAS Patuxent River tower
124.000 Potomac TRACON Arl Nat Cemetery Fly-bys
124.300 Martinsburg Airport Tower, WVA ANG
124.550 Potomac TRACON
124.800 Harrisburg PA tower
125.000 Langley AFB VA tower
125.650 Potomac TRACON
126.000 New Castle Airport Tower, DE
126.550 Potomac TRACON
126.150 Phillips AAF Aberdeen Proving Grounds (APG)
126.200 Weide AAF Aberdeen Proving Grounds (APG)

126.200 Ft. A. P. Hill VA tower/ops
126.200 NAS Patuxent River Webster OLF
126.300 Davison AAF Tower
126.350 Dover AFB Tower
126.550 Potomac TRACON
126.825 Potomac TRACON
127.950 NAS Patuxent River Approach/Departure
128.000 Potomac TRACON Andrews approach
128.350 Potomac TRACON
132.550 Wash ARTCC Snow Hill RCAG Cp Charles sec
133.900 Washington ARTCC Calvert
134.100 Dover AFB/McGuire AFB CP, Felker AAF Disp
134.350 Washington Area Helo Control (DCA)
135.025 NAS Patuxent River GCA
135.150 Dover AFB Approach/Departure
135.225 FACSFAC, Va Capes "Giant Killer" W105/106
135.525 Washington ARTCC DC area/Guard Dog CAP
135.725 FACSFAC, Va Capes "Giant Killer" W107
136.275 FBI Manassas, poss Homeland Security (AM)
136.375 US Customs (AM Mode)
136.525 US Customs (AM Mode)
138.075 Sierra Nevada Corp test discrete (FM Mode)
139.000 104th FS MdANG Martin St AP *Raven Ops* AM
139.150 Andrews AFB 121st FS DC ANG (AM mode)
139.150 Joint Air Def Ops Ctr (JADOC) Bolling, *Sparkle*
139.150 Atlantic City Int'l Airport 119th FS NJ ANG (AM)
139.300 Adw AFB Pilot to Disp, ArNG Ops McGuire-Dix
139.400 Davidson AAF Operations (AM mode)
139.450 Andrews AFB 121FS DC ANG (AM mode)
139.700 NORAD Eastern Air Def Sec "Huntress" (AM)
139.875 McGuire Tanker Interplane (AM mode)
139.850 Sierra Nevada Corp test discrete (FM Mode)
139.900 Andrews AFB MD 121st FS SOF (AM Mode)
140.100 Atlantic City Int'l Airport 119th FS NJ ANG (AM)
140.200 Atlantic City Int' Airport 119th FS NJ ANG (AM)
140.175 Atlantic City Int'l Airport 119th FS NJ ANG (AM)
140.700 Atlantic City Int'l Airport 119th FS NJ ANG (AM)
141.550 Andrews AFB Command Post "Griffin" (AM)
141.575 Maryland Civil Air Patrol (FM Mode)
141.700 Andrews AFB 89AW/1HS Operations (AM)
141.750 Langley AFB Dispatch (AM mode)
142.125 VA ArNG, Richmond VA (AM Mode)
142.200 Felker AAF OPS, Ft Eustis VA (AM Mode)
142.750 Andrews AFB MD SAM OPS, 99th AS (AM)
143.150 Andrews AFB 121FS DC ANG (AM mode)
143.600 Andrews AFB 121FS DC ANG (AM mode)
143.700 Md Civil AP, Sec CONUS, Martin Airprt rptr FM
143.825 McGuire tanker interplane (AM Mode)
143.900 Maryland Civil Air Patrol (FM Mode)
148.125 Md Civil AP, Pri CONUS Martin St., FM rptr.
148.150 Maryland Civil Air Patrol (FM Mode)
149.150 Assoc w/Army Night Vis (NVESD), Davison-FM
149.275 Md Civil Air Patrol Air #1- Martin State (FM)
149.300 MAW-4 Andrews AFB MD A-A (AM Mode)
150.550 Maryland ArNG helo air-to-air (FM Mode)
150.5625 Md Civil AP #2- Martin State Airport (FM)
157.050 USCG Air Sta. DC-also A-A for DC/Balto (FM)
157.075 USCG Ch. 81A-US Coast Guard Sector Balt
157.125 USCG Ch. 82A-US Coast Guard Sector Balt

157.150 USCG Ch. 23A-CGAS DC/Sect Baltimore (FM)
162.325 USCG CG 111-US Coast Guard Sector Balt
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227.125 Washington ARTCC Hagerstown RCAG
228.000 AAR 777 primary
228.175 1FW Langley AFB Air-Air
228.450 1FW Langley AFB Air-Air
228.900 Huntress DC area/Guard Dog CAP
229.400 Weide AAF, Aberdeen (APG), Davison AAF twr
229.600 Phillips AAF, Aberdeen Prov Grds (APG)
233.450 Bollen Range/Kiowa MOA, Ft Indiantown GAP
233.525 1st FW Langley AFB VA
233.550 1st FW Langley AFB VA
233.700 FACSFAC, Va Capes "Giant Killer" W72 pri.
234.600 Huntress/ NORAD Blue 10
234.800 121st FS DC ANG Andrews Ops, discrete
235.100 AR206L primary/ AR328 primary
235.625 ZDC Blackstone
236.550 FACSFAC, Va Capes *Giant Killer* W386 disc.
236.825 Washington ARTCC Snow Hill RCAG
237.800 VFA-106 Oceana NAS VA
238.100 FACSFAC, Virginia Capes "Giant Killer" W386
238.825 1st FW Langley AFB VA
238.900 AR 636 primary
239.025 Potomac Tracon (126.825)
239.050 New York ARTCC Joliet RCAG Lancaster sect.
239.150 assoc w/Kiowa MOA Range
239.800 McGuire AFB/Langley AFB Metro
239.875 VFA-131 Oceana NAS
241.450 NAS Patuxent River MD Echo Control
243.000 UHF Guard
246.800 Army National Guard A-A common
248.400 Aberdeen Proving Grounds Range Control
249.650 NAS Patuxent River test discrete
249.800 FACSFAC, Virginia Capes "Giant Killer" W386
250.050 FACSFAC, Virginia Capes "Giant Killer" W386
250.100 Unid discrete at NAS Patuxent River
250.300 NAS Patuxent River Approach/Departure
250.700 NAS Patuxent River VX-23 Operations
250.850 NAS PAX Area Adv Ctrl "Bay Watch "-r/w wing
251.200 108th ANG McGuire AFB NJ CP “Torch Ctrl.”
251.250 Pilot to Dispatch (Navy at ADW)
251.250 Langley AFB CP (Raymond 16)
252.100 Scream Ops at Westover ARB, MA
252.100 AFRC at Pittsburgh PA
253.500 Langley AFB VA tower
254.025 NAS Patuxent River MD test discrete
254.200 FACSFAC, Va Capes "Giant Killer" discrete
254.250 Potomac TRACON
254.300 Wash ARTCC Ship Bottom RCAG Coyle sector
254.525 Martin State Airport MD ANG Tower
255.000 FACSFAC, Virginia Capes "Giant Killer" W107
255.125 VFA-105 Oceana NAS air to air F-18
255.400 Leesburg VA/Millville DE Radio FSS
255.700 Felker AAF OPS, Ft Eustis VA
255.800 Huntress
256.500 NAS PAX Area Advisory Control " Bay Watch "
257.100 Command Post Pope AFB NC
257.200 Potomac TRACON
257.700 Wash ARTCC Whaleyville RCAG Salis sector
257.750 Potomac TRACON
257.875 Potomac App/Dep LURAY (118.675)
257.875 Dover AFB DE Approach/Departure
259.000 CORONET Charlie Secondary
259.025 NAS PAX Range Ops Atlantic Test Range
260.900 Huntress DC area/Guard Dog CAP
261.000 119th FS NJ ANG Devil Ops Atlantic City Int’l
261.050 CORONET Golf Secondary
262.025 149th FS VA ANG Langley AFB Air-Air
263.100 Washington ARTCC Azalea sector
264.150 NAS Patuxent River NTPS Operations
264.550 NAS Patuxent River Echo Control
266.600 104th FS MD ANG A-10s Martin State A-A
267.000 NAS Patuxent River test discrete
267.350 Sierra Nevada Corp test discrete- AM & FM
267.400 PAX - Greyhawk
268.025 McGuire tanker A-A
268.400 CORONET Charlie Primary
268.800 NAS Chambers VA Operations
268.850 NAS Patuxent River Echo Control
269.000 Potomac TRACON
269.100 New York ARTCC Milton Sector
269.150 ZDC Wilmington, NC
269.350 Harrisburg PA tower
269.400 ZDC Franklin
269.500 Potomac TRACON Andrews App
269.900 1st FW Langley AFB Virginia A-A
270.050 CORONET Hotel Secondary
270.275 Potomac TRACON
270.300 NY ARTCC Big Flat RCAG Lancaster sector
270.350 Washington ARTCC Shenandoah sector
270.400 CORONET Delta Primary
270.800 NAS Pax Area Advisory Ctrl "Bay Watch" #9
271.400 104th FS MD ANG A-10s Martin State A-A
271.475 CORONET Juliet Secondary
271.500 FACSFAC, Va Capes "Giant Killer" W72, alt.
271.600 NAS Norfolk Metro
272.400 Unid test freq (Monkey Ball & Romeo)
273.525 Harrisburg PA approach.
273.600 NY ARTCC N. Mt. PA RCAG Stoney Fork Sect.
273.950 MCB/MCAF Quantico HMX-1 discrete
274.425 CORONET India Secondary
274.450 AAR discrete
275.200 Northrop-Grumman Test Facility Bal-discrete
275.300 VFA-106 Oceana NAS
275.700 Martin State ANG Raven Ops (104th FS)
276.675 1st FW Langley AFB Virginia A-A
277.050 NAS Patuxent River test discrete
277.350 Sierra Nevada Corp test discrete (AM & FM)
277.350 Guard Dog CAP AAR secondary
277.600 NORAD Eastern Air Defense Sector Huntress
278.300 NY ARTCC Flint Hill RCAG Pottstown sector
278.675 CORONET Echo Secondary
279.200 CORONET Alpha Primary
279.275 Potomac TRACON-Arl Nat’l Cemetery Flybys
279.625 Dover AFB tower
279.650 ZDC Rocky Mount,NC High
281.400 Wash ARTCC Patuxent Rvr RCAG Calvert sect

281.450 Washington ARTCC Atlantic City RCAG
281.525 Harrisburg Approach/Departure
281.800 NAS Patuxent River Approach/Departure
282.200 Wash ARTCC Bucks Elbow RCAG Casanova
282.300 New York ARTCC Matawan sector
282.425 US Customs Blue 1
282.575 Potomac TRACON
283.100 Warren Grove NJ Range
283.750 457th Airlift Squadron/JOSA "Channel 20"
284.700 Wash ARTCC Bucks Elbow RCAG Montebello
285.150 94th FS Langley AFB VA A-A
285.200 CORONET Bravo Primary
285.400 Wash ARTCC Sea Isle RCAG Casino sector
285.600 Washington ARTCC Blue Ridge Sector
285.650 New York ARTCC Lancaster sector
277.050 NAS Patuxent River test discrete
277.350 Possibly Sierra Nevada Corp test freq-FM
288.000 AAR discrete
288.350 Wash ARTCC Gambrill MD RCAG Binns Sect.
288.400 NORAD Eastern Air Defense Sector Huntress
289.400 CORONET Bravo Secondary
289.600 CORONET Delta Secondary
290.425 Wash ARTCC Green Bay RCAG Franklin sect.
290.475 Potomac TRACON
291.150 NAS Patuxent River Echo Control
291.200 SEAHAWK01
291.775 Potomac TRACON
291.900 CORONET Foxtrot Secondary
292.200 Andrews AFB MD 89AW/1HS Air-Air
292.800 Andrews AFB MD SAM A-A (clear & encrypt)
293.200 104th FS MD ANG A-10s Martin State A-A
293.300 Martin State Airport 135th Cmd Post Crab Ops
293.500 WHEELHOUSE (Pentagon) tertiary
294.625 CORONET Golf Primary
295.400 AAR discrete-NJ ANG F16s & KWRI KC-135Rs
295.800 NORAD BLUE 20/mostly AAR AR631
296.900 1st FW Langley AFB A-A
297.200 Martin State Airport Tower
297.500 1st Helo Squadron Andrews AFB MD
297.900 Pikeside CO WVA ANG Martinsburg MD
298.900 New York ARTCC Elmira sector
299.200 Cleveland ARTCC Altoona Sector
302.550 NAS Patuxent River Ops
302.600 VMFA-321 CP
303.000 AAR & Torch Control McGuire
305.000 FACSFAC-Va Capes *Giant Killer* W105/6 sec.
305.200 NAS Pax Rvr Area Advisory Ctrl " Bay Watch "
305.500 AR-777 & AR-20
305.500 CORONET Alpha Secondary
305.700 MCAS Cherry Pt NC Command Post
306.200 New York ARTCC Philipsburg RCAG
306.925 Potomac TRACON
307.025 Wash ARTCC Falls Church RCAG Potomac
307.200 Potomac TRACON
307.250 Washington ARTCC Dupont Sector
307.900 Potomac TRACON
308.350 US Customs Blue 2
308.800 CORONET Juliet Primary
310.150 VQ-4 Det, NAS Patuxent River MD
310.225 NAS Pax River, poss P8 Poseidon test discrete
310.350 VMFA-321 F-18s
310.400 NASA Ops Langley AFB VA
310.550 NAS Pax River Area Advisory Ctrl "Bay Watch"
311.000 VQ-4 Det, NAS Patuxent River MD
311.000 PA ANG, 171st ARW "Steel Ops" Pittsburgh
311.000 East Coast TACAMO EAM broadcast
312.300 FACSFAC-Va Capes *Giant Killer* W386
313.500 NAS Patuxent River discrete (Button 11)
313.700 NAS Patuxent River MD VX-20 discrete
314.000 NAS Patuxent River Approach/Departure
314.250 Andrews AFB MD 201st AS DC ANG "Boxer"
315.800 NAS Patuxent River MD
315.850 1st FW Langley AFB VA
315.900 AR 777 secondary
317.375 CORONET Hotel Primary
317.425 Potomac TRACON Departure
318.000 CORONET Echo Primary
318.900 HMX-1 MCAF Quantico VA
319.000 Washington ARTCC Marlinton Sector
319.175 CORONET Kilo Primary
319.400 McGuire AFB Command Post "Brickyard"
319.700 AR 636 secondary
320.450 NAS Patuxent River MD Echo Control
320.600 NORAD BLUE24/AAR
321.000 108th ANG McGuire AFB NJ CP Torch Control
322.300 Potomac App (119.85)
322.400 New York ARTCC Big Flat RGAG
322.450 ZDC Raleigh
322.550 Washington ARTCC Linden RCAG Linden sect
323.000 ZDC Cofield
323.125 Potomac App for Charlottesville area
323.225 Washington ARTCC Hopewell sector
323.300 NY ARTCC Millville RCAG Lancaster sector
323.700 MCAS Quantico VA-range control
323.800 East Coast TACAMO EAM broadcast
324.000 NORAD/DC CAP common coord (BLUE25)
324.600 AAR AR204/AR-207
324.800 NAS Pax River Ctrl/Flight Test RDTE Support
327.000 Wash ARTCC Falls Church RCAG Brooke sect
327.100 ZOB Blue Knob low
327.800 Wash ARTCC Whaleyville VA RCAG Norfolk
328.400 Andrews AFB VR-53 Operations
328.400 Quantico Range Control Secondary
333.300 USAF Common
335.500 Potomac TRACON
335.600 New York ARTCC Modena RCAG
337.225 GIANTKILLER Common Area discrete
338.250 Potomac TRACON
338.100 FACSFAC, Va Capes "Giant Killer" W105/106
338.300 New York ARTCC Williamsport sector
339.600 USMC AAR
339.675 VX-20 NAS Patuxent River flight test discrete
341.100 NAS Patuxent River VSX-1 Ops
341.750 AR20 Primary
341.800 W386/AWACS discrete
341.950 NAS Patuxent River Echo Control
342.000 Dover AFB Metro
343.000 142nd AS DE ANG base ops New Castle Cty

343.700 Potomac TRACON KDCA (121.05)
343.775 Potomac Approach [120.45/124.65]
344.600 Andrews AFB Metro
344.800 CP Langley AFB VA
345.000 Coast Guard primary A-A
345.100 NAS Pax Rvr VX-20 Operations/RDTE Support
346.375 ZDC High Alt RCAG Green Bay VA Wahoo
346.600 FACSFAC, Va Capes *Giant Killer* W386
348.000 NAS Patuxent River MD Approach/Departure
348.725 Potomac TRACON
349.000 Andrews AFB Tower
349.400 Dover AFB Command Post
349.500 NAS Chambers VA Command Post
349.700 AR 20 secondary
350.000 FACSFAC, Virginia Capes "Giant Killer" W386
350.025 US Customs Blue 3
350.050 FACSFAC, Virginia Capes "Giant Killer" W386
350.250 Potomac TRACON
350.300 New York ARTCC Matawan RGAG
350.500 1st FW Langley AFB VA A-A
351.200 Andrews AFB 459ARW/756ARS CP "Liberator"
351.900 ZDC Gordonsville
352.000 ZDC South Boston
353.425 NAS Patuxent River test discrete
353.700 Norfolk Radar Approach
354.000 AAR discrete
354.100 ZDC Tar River

354.150 Wash ARTCC Kenton RCAG Kenton sector
354.800 NAS Pax River Area Advisory Ctrl "Bay Watch"
355.000 CORONET Foxtrot Primary
355.300 MCAF Quantico VA Base Ops
355.800 NAS Pax River Area Advisory Ctrl "Bay Watch"
358.850 W386/AWACS discrete.
359.100 Washington ARTCC Gordonsville Sector
360.250 CORONET India Primary
360.200 MCAF Quantico VA tower
360.600 Norfolk TRACON West
320.625 CORONET Kilo Secondary
360.650 ZDC Dixon
360.700 Washington ARTCC Baltimore RCAG Swann
360.850 Washington ARTCC Falls Church RCAG Irons
362.600 NAS Patuxent River Approach/Departure
363.000 Wash ARTCC Millville RCAG Woodstowne
363.075 Cleveland ARTCC Altoona Sector
363.350 NAS Pax Rvr Range Ops telemetry Prog Coord
363.900 1st FW Langley AFB VA A-A (39 prime)
364.125 94th FS Langley AFB VA discrete
364.200 Huntress/AICC
365.700 NAS Patuxent River test discrete
365.950 Virginia ArNG Richmond VA
368.800 Andrews AFB MD Naval Air Facility Ops
369.400 NAS Pax River Range Ops Flight Test
369.900 NAS Pax River Area Advisory Ctrl "Bay Watch"
370.850 Related to Martinsburg/wx, also Chambers Grd
370.925 Norfolk App
372.200 ADW/Dover AFB Dispatch & JB McGuire Dix
373.000 Dover AFB Approach/Departure
373.100 NAS Patuxent River Test Complex.
375.600 NAS Patuxent River Test Complex
376.075 US Customs Blue 4
376.200 Langley AFB Dispatch.
376.800 NAS Ptuxent River MD test discrete
377.200 Wash ARTCC Roanoke VA RCAG Tech Sect.
378.100 Andrews AFB Command Post "Griffin"
379.300 ZDC Martinsburg Ultra-high
379.725 NAS Patuxent River test discrete.
381.700 NAS Patuxent River Echo Control
382.200 Atlantic City Int'l Airport 119th FS NJ ANG
383.300 NAS Pax Rvr Shade Tree Ctrl-Atlantic Test Tk
389.100 Giant Killer NJ ANG U16
391.200 Giant Killer
395.100 193rd SOG PA ANG Harrisburg PA-Baton Ops

SOFTWARE DEFINED RADIOS

By Michael Agner

The rise of software-defined radios (SDRs) in the monitoring hobby is one topic that's so hard to keep up with, as the field is expanding so rapidly.

As a starting point, I offer this link to the SDR article in the RR wiki. Notice that the SDRs listed there are grouped (more or less) by their frequency coverage.

The SR dongles have captured a lot of attention these days, as well as Airspy. There is, in fact a blog on that very subject.

CHM GET-TOGETHER
Sat. Jan. 31, 2015 !!!

Ledo's Restaurant in College Park has reserved space for us at 2 p.m. Saturday, January 31, 2015. We can talk about radio, hear from *Chopper Brad* and others.

Ledo's might do a group check. So please bring extra $1's with you along with change for parking. Please watch where you park because there is no free parking on Saturday!

The restaurant is at 4509 Knox Rd near the Univ. of Maryland off Route 1.

EVERYBODY'S WELCOME TO COME.

In the event of snow, e-mail or call Alan, 202-439-1618.

The Capitol Hill Monitor
c/o Alan Henney
6912 Prince George's Avenue
Takoma Park, MD 20912-5414

INSIDE:

- D.C.'s last media aircraft "News 1"
- Scanning Metrobus
- DCFD goes encrypted; who's next?
- Monitoring military aircraft

CHM GET-TOGETHER SCHEDULED SATURDAY, Jan. 31, 2015, IN COLLEGE PARK. SEE page 7.

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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