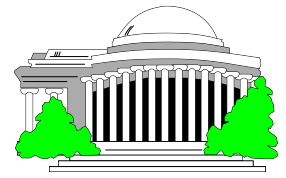


The Capitol Hill Monitor



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SCANNING THE 59th PRESIDENTIAL INAUGURATION

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America's 46th President, Joe Biden — [codenamed](#) "Celtic" by the Secret Service — will take the Oath of Office on Wednesday, January 20, 2021. The nation's 59th Inaugural activities will include *Pass in Review*, *Presidential Escort*, and a *Virtual Parade Across America* as explained in the [Presidential Inaugural Committee \(PIC\) website](#).

This is the 9th CHM inaugural scanning guide and our most detailed ever, thanks to many contributors. Please continue to share your discoveries on the [Scan-DC](#) email list or on the [CHM Facebook page](#).

Encryption use continues to increase, but don't assume these channels are entirely encrypted until you try to monitor them. Also, many federal agencies have changed frequencies or are in the process of doing so to conform with [NTIA band plans](#).

Analog channels have the CTCSS listed in brackets or the DCS code denoted with a "d." Network access codes (NAC) for P25 freqs start with a "\$" and are shown in hex. Trunked control channels are underlined. For details on common repeater inputs/offsets see this [RadioReference page](#).

FEDERAL AGENCIES

The [Joint Congressional Committee on Inaugural Ceremonies](#) (JCCIC) is responsible for the planning and execution of the swearing-in ceremonies and the inaugural luncheon at the U.S. Capitol.



USCPD (582-0101) [NAC \$580]:
169.575/162.25, 169.8375/162.6125, 170.1375/162.8, 170.375/163.1625, 170.575/163.6, 171.0/164.0125, 171.4125/164.325, 171.7875/164.6125, 172.3875/164.8125, 172.6875/165.0875, 172.9625/165.5375, 173.1625/165.775, 173.475/166.225 and 173.8125/166.425 (this last pair has not recently been part of the trunking pool).

The U.S. Capitol Police operates on this digital P25 trunked network. This is fully encrypted, but we list it because of the U.S. Capitol grounds' significance to the overall event.



USCPD also has an in-town conventional repeater that can patch outside users into the trunked system. It is known as "Red 1" and operates on 169.725/165.225 with NAC \$1A3. Its talkaround, 169.725, is the "T/A LOS1" (talkaround, line-of-sight) channel. These too are entirely encrypted.

In addition, these repeater pairs are allocated to USCPD for use nationwide: 163.1/168.35 [Blue], 166.45/173.525 [Green] and 166.475/173.875 [Black]. These USCPD simplex channels are for use nationwide: 168.35 [Alpha], 173.525 [Bravo] and 173.875 [Charlie]. NACs reported in use include \$293, \$1A3, \$1B3, \$1C3 and \$1D3.

Unconfirmed USCPD freqs reportedly used at past political conventions included 171.575 and 172.1875. See [Chris Parris' blog](#) for other freqs to try for USCPD.

Other Capitol Hill Radio Users

167.8875 p	[None]	House Republican Pager
168.3125 p	[None]	House Democrat Pager
411.2625 p	[None]	Capitol PD Incident Notification
173.6375 r	[\$293]	Supreme Court Security (input?)
408.3000 r	[]	Nationwide Senate Repeater
406.3875 t	[DMR]	Cong. Guide Svc., LCN1 CC11
408.5125 t	[DMR]	Cong. Guide Svc., LCN2 CC12
409.8375 t	[DMR]	Cong. Guide Svc., LCN3 CC13
406.9375 r	[77.0]	Capitol Audio/Visual
407.7875 r	[d364]	Capitol Motor Pool (DMR also?)
409.5500 r	[\$375]	Senate Parking/Emer Ops.
409.5125 r	[\$079]	Gov't Printing Office Security
406.5500 r	[210.7]	Natl Art Gallery (now DMR CC9)

413.1, 418.075 and 418.55 are designated for use by Congress for low-power emergency or contingency communications. In D.C., the Senate has 411.45 as a legislative clock paging channel with 413.175 for use outside of D.C.

The former Senate VHF paging channels and associated UHF links remain authorized but apparently unused. They were 171.175/406.8 and 171.975/406.675. 413.15 is reserved for Senate paging outside of D.C.

NATIONAL PARK SERVICE

The U.S. Park Police switched to encrypted P25 conventional channels in the fall of 2018. The agency also has secure talkgroups on the IWN system (see page 5) for backup use. The NPS has nearly abandoned many radio channels although they remain programmed, ready and authorized for use.

National Park Service/Capital Parks/U.S. Park Police		
171.7750 r	[\$CF9]	Park PD Dispatch (164.475 in)
169.7875 r	[\$CF9]	Park PD Admin. (164.775 in)
169.7000 r	[\$CF9]	Park PD Sp Evts (163.3625 in)
166.8500 s	[\$CF9]	Park PD Talkaround
168.4250 r	[\$293]	NCP East 1 (170.1 in)
171.7250 r	[\$293]	NCP East 2 (172.525 in)
172.4750 r	[\$4C5]	Mall Interpreters (171.675 in)
170.5125 r/s	[\$4C5]	Mall-Haines Pt. (164.575 in)
172.7500 s	[\$4C5]	Mall Ops Direct
172.4375 r	[\$4C5]	President's Park (164.8375 in)
171.6500 s	[\$293]	White House-Pres's Pk-Maint
168.3000 s	[\$4F9]	GW Pky.
169.7750 r	[\$4C5]	GW Pky-Arl Hse (163.3375 in)
173.8250 r	[\$4C5]	GW Pky-Ft Hunt (163.3375 in)
170.0500 r	[\$4C5]	GW Pky-Gr Falls (163.3375 in)
170.1000 s	[\$293]	Ft. Wash.-Direct (also input!)

FEDERAL HOMELAND SECURITY AGENCIES

All DHS radios are programmed with common standard interoperability (IO) zones. On VHF, the DHS **IO1 zone** has DHS-Net/DHS-Tac, NC 1, IR 1 to IR 9 followed by LE A, and LE 1 to LE 3. On UHF, the DHS **IO2 zone** has DHS-Rpt/DHS-Sim, NC 2, IR 10 to IR 18 followed by LE B, and LE 10 to LE 12.

DHS also has six more optional IO zones designated as IO3 through IO8. See pages 10-11 for details on those zones and the NC/IR/LE freqs.

DHS Common Channels

170.7875 r/s	[varies]	DHS-Net 165.8375/163.1125-in
168.5875 s	[\$001]	DHS-Tac "Nat Tac 2"
408.2875 r/s	[\$001]	DHS-Rpt (418.2875 in)
412.4375 s	[\$001]	DHS-Sim
166.4625 s	[\$001]	Fed Common "Treasury 4"
172.6000 r	[\$293]	Common Law 1 (169.8 in)
169.7000 s	[\$293]	Common Law 2 (U.S. Park PD)

Secret Service

As a [National Special Security Event](#) (NSSE), the [Secret Service](#) assumes its role as the lead agency for the design and implementation of the operational inaugural security plan.

The Multi-Agency Command Center (MACC) operating at the Secret Service's Washington field office, will be staffed by representatives from 50 to 60 agen-

cies, utilities and organizations.

While the traditional nationwide Secret Service "lettered" simplex channels remain unchanged, the Secret Service has undergone significant changes the past four years with regard to its repeater channels in Washington, D.C. The new freqs conform with [NTIA band plans](#). Please help us determine usage and inputs!



165.7875 s	[\$001]	Baker
165.3750 s	[\$001]	Charlie
165.2125 s	[\$001]	Mike
164.6500 s	[\$001]	Tango
164.8875 s	[\$001]	Oscar
164.4000 s	[\$001]	Papa
164.1750 p	[None]	White House Notification Network
166.2000 s	[\$001]	
167.0125 r/s	[\$001]	Special Events (165.6375 in)
167.0375 s	[\$001]	Special Events
173.4125 s	[\$001]	

Secret Service radios are pre-programmed with around 100 simplex channels intended for use outside the United States. A few of these channels have been used domestically at political conventions and inaugurations. These range from 160.2 to 173.9. All are P25 digital with NAC \$001. Those previously noted in use domestically include 163.325, 163.4875 164.9875 and 166.3125.

Also used occasionally in D.C. are the New York/Newark field office freqs: 164.1, 165.5125, 171.3875 and 172.225. Secret Service radios also have many White House Communications Agency freqs (page 7).

The Secret Service also has six channels reserved for use by the *Candidate Nominee Operations Section* (CNOS). They are *CNOS1* to *CNOS6*: 168.2375, 168.5875, 170.0875, 172.0625, 166.0 and 167.1, respectively. They too have been used at past political conventions, although we do not know if they still exist.

In his blog, [Chris Parris](#) provides a helpful list of former and current Secret Service/White House Communications Agency channels. Although we have no current confirmation, the UHF freqs he lists remain authorized and could be deployed for special purposes.

The Secret Service shares several nationwide repeater allocations with FEMA's Urban Search & Rescue (USAR). They include 406.65, 406.675, 406.7, 406.75, 406.8, 407.8, 407.85, 407.875, 407.9, 407.925 and 409.15 with simplex on 414.675.

The UDSS protects the White House and selected federal and foreign facilities in the Washington area and will also help provide security at presidential events. See the [December 2004 CHM](#) for details and for a complete list of the former freqs used in past years.

The new Secret Service repeater channels in Washington, D.C. appear to be 170.4375 with \$302; 170.2, 172.0625 and 173.4250 all \$311; 170.75, 406.675, 407.85 and 410.6875 all \$401; 406.7, 406.7375 and 406.8 with \$402; and 171.15 and 172.4125 all \$611.

In years past, ICE has provided pre-event planning, perimeter security and response capabilities as required along with aerial assets. During high-profile events, CBP helicopters, known as "Omaha" on the aircraft band, typically hover near the Capitol over east/northeast Washington while any additional Omaha helos patrol the entire region. The crews often communicate with each other on 136.375 while using 168.8375, typically encrypted, with their comm center.

Immigration & Customs Enfo/Customs & Border Prot

163.7250 r	[\$073]	ICE Wash Net 1 (162.825 in)
164.6750 r	[\$075]	ICE Wash Net 2 (162.85 in)
168.9250 r	[\$079]	ICE Wash Net 3-IAD (165.825 in)
172.5875 r	[\$077]	ICE Wash Net 4 (168.9375 in)
171.2500 r	[\$069]	ICE Nationwide RP (162.9125 in)
163.7250 s	[\$169]	ICE Nationwide Direct
163.7000 s	[\$169]	ICE Nationwide Tac 1
168.5875 s	[\$169]	ICE Nationwide Tac 2
163.1125 s	[\$169]	ICE Nationwide Tac 3
164.7875 s	[\$169]	ICE Nationwide Tac 4
173.9625 r	[????]	CBP DC area (162.8875 in)
165.2375 r	[\$301]	CBP DNet01 (166.4375 in)
169.4500 r	[\$301]	CBP DNet02-IAD (171.075 in)
165.4625 r	[\$301]	CBP DNet07-Philly (166.5875 in)
168.8375 s	[\$293]	CBP Air 1 (see note on Air 2 to 9)
136.2750 s	[None]	CBP/ICE Omaha helos
136.3750 s	[None]	CBP/ICE Omaha helos (main)
136.4750 s	[None]	CBP/ICE Omaha helos
136.5250 s	[None]	CBP/ICE Omaha helos
282.4250 s	[None]	CBP/ICE a/c "Blue 1" (main UHF)
308.3500 s	[None]	CBP/ICE a/c "Blue 2"
350.0250 s	[None]	CBP/ICE a/c "Blue 3" (Guardian)
376.0750 s	[None]	CBP/ICE a/c "Blue 4"

During the 2009 inauguration, ICE and HMX-1 used 122.8 for coordination during the ceremonial train trip to Washington. CBP aircraft work closely with Coast Guard helos and the military jets assigned to D.C. combat air patrols (CAP). See the CAP frequencies on page 7, especially 139.7. CBP has [eight more](#) VHF "Air" channels that could be used in Washington, D.C.

In addition to coordinating maritime security, the Coast Guard is tasked with airborne homeland security patrols and intercepting unauthorized aircraft entering restricted airspace. USCG helicopters use scrolling banner signs that instruct pilots to contact them on 121.5 (122.75 used for training), where they are given further instructions. Coast Guard helos assigned to D.C. are known as "Blackjack" because they originate from Air Station Atlantic City but operate from National Airport Hangar #7.

The USCG has more than [40 non-marine "CG" channels](#) available for use which may also be used by its land-based response teams. On the water, the agency will establish a [security zone](#) during the inaugural period. The CG also uses the MIC groups on the D.C. trunked system (page 9).



Coast Guard

156.8000 s	[None]	Ch. 16 (Hailing, Distress)
156.8500 s	[None]	Ch. 17 (D.C. harbor patrol coord.)
157.0500 s	[None]	Ch. 21 (CG, "Blackjack" helos)
141.5500 s	[\$293]	CG-106 (CGAS Washington 1)
150.3000 s	[\$293]	CG-107 (CGAS Washington 2)
162.0500 s	[\$293]	CG-108
162.3250 s	[\$293]	CG-111
163.0500 s	[\$293]	CG-112
164.3000 s	[\$293]	CG-114
164.5500 s	[\$293]	CG-116 (Org Cr Drug Enfo TF)
165.3125 s	[\$293]	CG-121 (CG Sta. Washington)
165.3375 r	[???	CGIS1 (171.3375 in)
412.9750 s	[\$293]	CG-409 (CG aircraft and cutters)
345.0000 s	[None]	Coast Guard a/c (primary)
237.9000 s	[None]	Coast Guard a/c (secondary)
326.1500 s	[None]	Coast Guard a/c (working main)
379.0500 s	[None]	Coast Guard a/c (working alt.)

Other Homeland Security elements participating will include those from the FPS, TSA and FEMA.

Federal Protective Service (FPS)

408.2000 r/s	[\$201]	FPS-1 (D.C. primary)
407.0000 r/s	[\$201]	FPS-2
410.8000 r/s	[\$201]	FPS-3 (D.C. primary)
406.2000 r/s	[\$201]	FPS-4 (D.C. alternate)
409.4000 r/s	[\$201]	FPS-5
413.9500 s	[\$293]	FPS simplex

TSA personnel from across the country could be called to assist with screening but assigned local radios or radios from a cache.

Transportation Security Administration (TSA)

171.1875 r/s	[varies]	Dulles Airport
172.1500 r/s	[varies]	National Airport
172.9000 r/s	[\$037, etc.]	National Airport (169.3 in)

Other simplex or input freqs reportedly used locally by the TSA include: 166.2875, 168.0875, 168.8375, 168.9625, 169.1625, 169.3 and 169.3875. Four of these are also CBP ["Air" channels](#).

Chris Parris reports that the TSA is planning to move from [VHF](#) entirely to UHF frequencies starting this year. That is part of his February column in [The Spectrum Monitor](#).

Federal Emergency Management Agency

As a designated *National Special Security Event*, FEMA has the primary responsibility for coordination of contingency planning and will provide readiness, coordination, response and recovery capabilities.

FEMA, much like the Dept. of Health & Human Services, sponsors specialized teams that will stage during the inauguration. FEMA has a standard set of channels for use nationwide and others specifically intended for the National Capital Region (NCR).

The National Interagency Fire Center (NIFC) has provided FEMA/DHHS with radios during large-scale disasters and special events. These radios come from the agency's [National Interagency Incident Communications Division](#) (NIICD) in Boise, Idaho. The radios could be used for the inauguration. Frequencies are [here](#).

Mobile Emergency Resource Support (MERS) teams provide electronic communications support to local public safety agencies. The Fairfax and/or Montgomery *Urban Search And Rescue* (USAR) teams likely could be placed on "alert status" during the inauguration. They specialize in confined-space rescue. Both teams will likely use both their county and FEMA radios. NACs commonly used by FEMA include \$312 and \$421 while NDMS uses \$447 among others. WMD/CST teams may use the MERS channels with different NACs as well.



FEMA

406.2625 s/r [varies]	FEMA
406.4500 s/r [varies]	NCR 1-4 DC Main
406.4625 s/r [varies]	FEMA
406.8625 s/r [varies]	FEMA 9/10 now
407.0625 s/r [varies]	FEMA
407.1250 r [varies]	DMAT
407.2625 s/r [varies]	FEMA 11/12
407.4500 s/r [varies]	NCR 11/12, FEMA, MERS 11/12
407.4625 s/r [varies]	FEMA 5/6
407.6625 s/r [varies]	FEMA 1 (linked nationwide)
408.0625 s/r [varies]	NCR 13/14, MERS 13/14
408.2625 s/r [varies]	FEMA
408.3000 s/r [varies]	DHHS
408.8625 s/r [varies]	USAR 1/2
409.0000 r [varies]	DMAT/DHHS Nat'l Ch/NDMS 1/2
409.0500 s/r [varies]	DMAT NDMS 7/8
409.0625 s/r [varies]	FEMA
409.0750 s/r [\$293]	NDMS 10/11 and FEMA 8/9
409.2625 s/r [varies]	USAR 3/4
409.4625 s/r [varies]	NCR 15, MERS 15, FEMA 11/12
409.6625 s/r [varies]	USAR 5/6
409.8625 s/r [varies]	NCR 5-6 DC Alternate, USAR 7/8
410.2625 s/r [varies]	USAR 9/10
410.4625 s/r [varies]	FEMA
410.6625 s/r [varies]	USAR 11/12
410.8625 s/r [varies]	NCR 9/10, MERS 9/10
412.8250 s [varies]	MERS 1, USAR 13

412.8375 s [varies]	MERS 3, FEMA 13, NDMS 15
412.8500 s [varies]	MERS 2, USAR 14
412.8625 s [varies]	MERS 4, FEMA 14, NDMS 16
412.8750 s [varies]	MERS 5, FEMA 11, NDMS 13
412.8875 s [varies]	NCR/MERS7, FEMA13,NDMS15
412.9000 s [varies]	FEMA 12, MERS 6, NDMS 14
412.9125 s [varies]	NCR 8, MERS 8
418.4625 s [141.3]	NCR Common

Although under separate departments, FEMA and DHHS are closely related and share similar or identical channel plans as shown here. Many of these UHF channels are shared between the departments and other federal agencies. Multiple NACs on the same channel could suggest multiple agencies.

FEDERAL HEALTH & HUMAN SERVICES AGENCIES

DHHS operates, funds and/or oversees several medical teams that will be available during inaugural events. The [National Disaster Medical System](#) (NDMS) assists local agencies with the medical impacts of major peacetime disasters and provides support for military casualties returning home. FEMA actually manages the NDMS radios. Also try the [NIH trunked system](#) for possible support activity in addition to those shown above.

FEDERAL JUSTICE DEPARTMENT AGENCIES

The Justice Department manages the [Integrated Wireless Network \(IWN\)](#) which is lightly used by various participating agencies including the ATF, DEA, FBI and U.S. Marshals Service. U.S. Park PD has several sets of encrypted TGs on IWN mostly for backup use.

Traffic on this system is so light, you could easily program the 10 repeater channels for these D.C. sites, lockout the control channels and scan them conventionally. The most notable user is the FBI police and encrypted DEA surveillance in the 356xx range.

IWN features multiple trunked sites in the 163-174 MHz band and is often encrypted but not entirely. The sites listed here cover downtown D.C. and are worth checking as they had some use in prior events. See [Radio Reference](#) for more. The channel pairs have changed recently to better conform to the NTIA [VHF band plan](#).

<u>IWN 010-1201 (MPD 4D tower, 6001 Georgia Ave NW)</u>		
172.0125 t [\$010]	Alternate Ctrl. Ch. (166.8875 in)	
172.1875 t [\$010]	Main Control Ch. (167.2875 in)	
172.2875 t [\$010]	Alternate Ctrl. Ch. (167.2375 in)	
172.6375 t [\$010]	Alternate Ctrl. Ch. (167.3875 in)	

<u>IWN 010-0401 (Hoover FBI Bldg., 935 Pa Ave NW)</u>		
168.9750 t [\$010]	Alternate Ctrl. Ch. (165.6 in)	
169.1875 t [\$010]	Alternate Ctrl. Ch. (165.0 in)	
171.4375 t [\$010]	Main Control Ch. (163.9 in)	
172.4250 t [\$010]	(166.0625 in)	

IWN 010-1801 (new/unknown D.C. site)
 167.8500t [\$010] (166.25 in)
 168.8750t [\$010] Main Control Ch. (165.2 in)

Federal Bureau of Investigation

During a designated *National Special Security Event* the FBI takes charge of intelligence, counter-terrorism, hostage rescue and investigation of incidents of terrorism or other major criminal activities associated with the event.

Since the 2017 inauguration, [news reports](#) surfaced that the Russians had successfully hacked the FBI's encrypted radio systems. Activity on the Bureau's radio channels had also declined in past years. One might also expect the agency to move frequencies to conform with the [NTIA band plans](#). What radio traffic that currently exists is light and encrypted.

We should anticipate changes beyond these old repeater pairs that have been used during previous inaugurations. The FBI and its police force also use the [IWN](#) system. See [Chris Parris' blog](#) for related info.

136.2750 s [None]	FBI/DHS aircraft (Limo, Ross)
167.3125 r/s [\$167]	
167.4125 r/s [\$167]	
167.5375 r/s [\$167]	
167.5125 r/s [\$167]	
167.5625 r/s [\$167]	Bureau Common
167.6375 r/s [\$167]	
167.6875 r/s [\$167]	D.C. Primary
167.7125 r/s [\$167]	
168.9250 r/s [\$167]	
170.8375 r/s [\$167]	



ATF agents will be on standby and may operate on [IWN](#) or their own channels. ATF building security uses [JIWN](#).

Alcohol, Tobacco, Firearms and Explosives Bureau
 165.2875 r/s [\$650] Nets 1 to 10 (166.5375 in)

AGENCIES FROM OTHER FEDERAL DEPTS.

State Department

The State Department provides security for the Secretary of State and foreign official visitors, except heads of state, who are protected by the Secret Service.

407.6000 r/s [\$0F0]	Protection details
407.8625 r/s [\$0F0]	Building security "Side Door"
408.6000 r/s [\$0F0]	Protection details
409.0375 r/s [\$0F0]	Protection details?
409.5250 r/s [\$293]	?
409.7125 r/s [\$294]	Maintenance or Shuttle?
413.6375 s [\$0F0]	Agent-to-Agent 1

[Chris Parris](#) lists six more of the agent-to-agent chan-

nels as well as two oddball channels, 403.1 and 424.5, which he suspects are intended for use outside the U.S.

Energy Dept-National Nuclear Security Administration

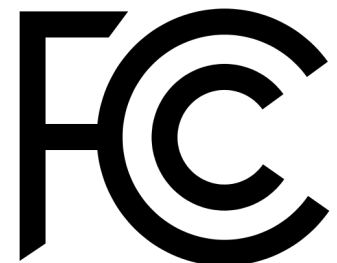
Expect the [Radiological Assistance Program \(RAP\)](#) and the [Nuclear Emergency Support Team \(NEST\)](#) to be available for any nuclear-related incident. The teams have four freqs that could be used nationwide and will likely be deployed for the inauguration:

164.6, 164.8625, 166.4875 and 172.55

Federal Communications Commission

167.0500 r/s [\$124?] FCC field info (172.8 in)

The FCC has been active during past events in Washington, often tracking sources of [interference](#) and pirate broadcasters. Also, anarchists and hackers in the past have threatened to interfere with radio communication.



As of this past Friday, activists have once again been threatening to jam various radio bands. Also, the RF noise floor has increased causing issues on at least one major radio network in the region, and perhaps others.

Also of concern is the possibility that radio equipment could be used as a detonator. Because of this, radio jammers have been deployed in some motorcades and event sites. This further complicates frequency coordination and cell phone usage (see page 12).

NTIA NXDN Trunked System

The Smithsonian museums, National Zoo and the Kennedy Center are among the most active users of the multi-site [NTIA trunked system](#) in downtown Washington. This system uses IDAS, Icom's NXDN trunking format. It is also entirely encrypted.

Common-Use Channels

Worth monitoring are these common-use frequencies which are available for use on a shared basis by any federal agency: 163.1/168.35, 163.7125, 168.6125, 173.625/167.1375, 407.525/416.525, 409.05/418.05, 409.075/418.075, 409.3375/418.3375, 412.825, 412.8375, 412.85, 412.8625, 412.875, 412.8875, 412.9 and 412.9125. The older wide-band channels are: 408.4, 418.05, 418.075 and 418.575.

Agencies with P25 radios often have a zone with their normal channels in analog mode. So don't necessarily assume everything will be digital.

MILITARY AGENCIESJoint Task Force-National Capital Region (JTF-NCR)

The [JTF-NCR](#), with service members from all military branches, is responsible for coordinating all military ceremonial support on behalf of the [PIC](#) and the [JCCIC](#).

The JTF-NCR will coordinate the service members who will provide musical elements, color guards, salute batteries and honor cordons.

The [JNCR 380 MHz trunked system](#) consists of networked sites that link most facilities under the JTF-NCR command. Typically the same talkgroup will simulcast across multiple sites. Only those sites closest to downtown are shown here.



The inaugural task force's command and control nets have often operated on Belvoir's radio nets. See this [RadioReference](#) link for talkgroups.

001-0101 [NAC \$001] **Fort Belvoir, Va:** [381.675](#), [381.825](#), [381.975](#), [385.0125](#), [385.2125](#), [385.8875](#), [386.1875](#), [386.3375](#).

002-0101 [NAC \$002] **Mark Center, Alexandria, Va:** [380.0625](#), [380.325](#), [380.375](#), [380.625](#), [380.675](#), [380.825](#), [380.975](#), [381.0875](#).

002-0202 [NAC \$003] **Pentagon, Va:** [380.2125](#), [380.525](#), [380.775](#), [381.1375](#), [381.625](#), [381.775](#), [381.925](#).

006-0606 [NAC \$008] **Tyson's Corner, Va:** [380.075](#), [380.425](#), [380.725](#).

006-0707 [NAC \$009] **Silver Hill, Md:** [380.275](#), [380.575](#), [380.875](#), [381.7375](#).

007-0202 [NAC \$005] **Adelphi Laboratory Center, Md:** [389.025](#), [389.575](#), [389.725](#).

00C-0101 [NAC \$00C] **Pentagon-East, Va:** [381.2875](#), [385.7125](#), [386.2125](#), [386.5625](#), [386.8125](#).

015-0404 [NAC \$00B] **JB Anacostia-Bolling, DC:** [386.0625](#), [386.9625](#), [388.2625](#), [388.5625](#), [388.8875](#), [389.0375](#), [389.1625](#), [389.2375](#), [389.4875](#), [389.8375](#).

015-0707 [NAC \$06A] **Walter Reed NMMC, Bethesda, Md:** [385.0875](#), [385.325](#), [385.725](#), [385.9375](#), [387.175](#), [387.475](#), [387.975](#).

Joint Base Andrews may be especially interesting as various VIPs arrive and depart. JBA public safety uses talkgroups in the 251xx range on the [JNCR network](#).

019-2727 [NAC \$06D] **JB Andrews, Md:** [385.175](#), [385.3125](#), [385.9](#), [385.9125](#), [386.0375](#), [386.2](#), [386.375](#), [386.5](#), [386.6375](#), [386.8](#).

This aviation section has been compiled mostly by Ron Perron with the assistance of Larry Van Horn. Also see Ron's extensive military [call signs](#) and [aviation freqs](#).

Joint Base Andrews (KADW) Aviation Freqs

118.400 / 349.000 Andrews Tower
 121.800 / 275.800 Andrews Ground
 128.000 / 269.000 Potomac Approach (seldom used)
 118.675 / 323.175 Potomac Approach (seldom used)
 125.650 / 348.725 Potomac Departure (east) (ADW)
 118.950 / 257.200 Potomac Departure (west) (ADW)
 323.175 Potomac Approach/Departure
 127.550 / 285.475 Clearance Delivery
 351.200 AFRC 756th ARS Ops
 328.400 US Navy VR-53 Ops/CP
 121.500 / 243.000 Emergency
 141.550 / 378.100 Andrews Command Post "Griffin"
 128.350 / 257.200 RADAR, also: 286.6, 301.5, 316.7
 139.300 / 372.200 Pilot to Dispatch (PTD) (rarely used)
 133.750 / 254.350 Spisy Star
 125.350 / 335.500 GCA, also: 360.8, 379.2
 120.450 / 306.925 Tikee Star
 126.400 / 282.375 Voodoo Star
 292.800 Air Force 1/SAM Air-to-Air (A-A)
 141.700 / 292.200 1st Helo Squad, 89th A/W, ("Musel")
 293.600 Musel Ops
 225.600 Musel Air to Air

Fort Belvoir/Davison Army Airfield (DAA)

Among other tasks, Fort Belvoir/Davison Army Airfield (KDAA) provides "shuttle" services around the Military District of Washington for military VIPs.

118.850 Davison AAF GCA/P
 119.950 Davison AAF RADAR
 121.900 Ground Control
 126.300 Tower
 128.175 ATIS
 139.400 / 34.10 Davison AAF Metro/PTD "Davey Ops"
 229.400 Tower
 241.000 Tower
 121.900 / 351.800 Clearance Delivery/Ground Control

Pentagon Heliport (KJPN)

143.100 Tower
 231.300 Tower
 268.000 Wheelhouse Pentagon switchboard
 287.600 "Foghorn Control"

This next P25 trunked site (14C) is part of the Marine Corps system at the Pentagon which has been used to support the annual marathon. It is part of this [Navy/Marine trunked network](#), not the JNCR system.

14C-0403 [NAC \$140] **Joint Base Myers-Henderson Hall, Va:** [380.4875](#), [381.2](#), 381.3375, 381.6875, 381.8375.

This system has been reportedly used at the Marine Corps Historic Half Marathon in Fredericksburg.

355-0101 [NAC \$350] **USMC Portable TRS:** 386.175, 386.325, 386.475, 386.625, 386.775, 386.025, 386.175, 386.325, 386.475, 386.625, 386.775, [386.925](#), [388.075](#), [388.225](#), [388.525](#).

The Marine Corps presidential and vice-presidential executive flight squadron is known to the military as *HMX-1*, to the Secret Service as *Nighthawk*, and to the public as *Marine 1 or 2*. HMX-1 helos and V-22 Ospreys are based at MCAF Quantico, Va., but often stage at the old Naval Air Station in Anacostia.

USMC Exec Flight Sq (HMX-1)-MCAF Quantico (KNYG)

263.150 Quantico ATIS
 355.300 Quantico Base Ops
 340.200 Quantico Ground
 127.050 / 290.375 Quantico Approach
 118.600 / 360.200 Quantico Tower
 265.800 Quantico Common
 375.000 Quantico Helipad
 277.175 HMX-1 Control
 143.825 / 273.950 HMX-1 Discrete
 142.750 HMX-1 Discrete
 276.400 HMX-1 Ops
 318.900 HMX-1 Base
 320.400 HMX-1 Maintenance



Combat Air Patrols

139.700 Huntress, Coast Guard Helos
 260.900 Huntress, CAPs
 228.150 Discrete
 247.050 Refueling
 228.900 Huntress
 135.525 "Guard Dog" (NCR CAP Coordination)
 350.250 "Guard Dog" (NCR CAP Coordination)

Tactical aircraft radios in the 138-144 MHz band employ amplitude modulation (AM). The Coast Guard helos (see page 3) assist with combat air patrols. Also note the discrete air freqs used by Homeland Security/CBP (page 3) and FBI (page 5).

Here are other important aviation frequencies — especially 134.35 — which are useful to identify what aircraft are flying over D.C. The FAA has issued a [flight advisory](#) for the inauguration period.

National Airport (Mount Vernon Sector)

118.300 / 306.300 Final East DCAFE
 118.950 / 257.200 Departure West (loiterers over D.C.)
 119.100 / 257.600 Reagan Tower
 119.300 / 335.500 Approach ADWAR

119.850 / 322.300 Approach West QJAAY
 134.350 / 257.600 Washington Helicopter Control
 121.050 / 343.700 West 10,000' up to FL 230 FLUKY
 121.500 / 243.000 Aircraft Emergency
 124.000 / 279.575 Andrews for Arl. Flyovers, ADWFR
 124.200 / 269.000 Approach East ENSUE
 124.700 / 338.200 Final West DCAFW
 125.650 / 348.725 Dep. East 9500' & below KRANT
 126.550 / 269.500 Dep. East 10,000' thru FL190 DAILY
 128.350 / 270.275 App. SE 19K ft down to 3K ft DEALE

Civil Air Patrol (CAP)

Don't confuse Combat Air Patrols with the Civil Air Patrol, both CAP! The Civil Air Patrol radio nets are typically activated to support the inauguration. Each repeater has a unique CTCSS and NAC.



148.1250 r [136.5/\$555] Downtown DC (143.55 in)
 148.1375 r [varies] Tac/Airborne RP (143.625 in)
 148.1500 r [136.5/\$555] Bailey's Crossroads (143.7 in)
 149.2750 s [141.3/\$585] Air 1/1P
 150.5625 s [151.4/\$5EA] Air 2/2P, Falcon Virgo Drills
 139.8750 s [173.8/\$6CA] Tac 1/1P
 141.5750 s [127.3/\$4F9] Command & Control 1/1P
 141.0000 s [131.8/\$526] Command & Control 2/2P
 150.2250 s [162.2/\$656] Guard 1/1P

White House Communications Agency (WHCA)

Another important military element that provides support to the inauguration, as well as the President, is the *White House Communications Agency (WHCA)*. Agency personnel routinely use Secret Service and DoD networks in addition to these freqs and others.

169.9250 s [\$001] Delta
 172.4125 s [\$001] Hotel (was 167.9 MHz)
 166.7000 s [\$001] November
 166.2000 s [\$001] Naval Sup Facility-Camp David
 166.5125 s [\$001] Sierra

On his [blog](#), Chris Parris lists 11 channels for a transportable WHCA UHF trunking system. Also, the channels formerly used for phone patches and paging, 407.85/415.7, 167.025/413.05 and 162.6875/171.2875, have been mostly inactive but are still authorized.

Military Intra-Squad Radios

The military set aside 14 freqs similar to the civilian FRS band, but the last two freqs were in error and channels 10 and 11 are not authorized for use by the Civil Air Patrol: Ch.1 396.875, Ch.2 397.125, Ch.3 397.175, Ch.4 397.375, Ch.5 397.425, Ch.6 397.475, Ch.7 397.55, Ch.8 397.95, Ch.9 398.05, Ch.10 399.425, Ch.11 399.475, Ch.12 399.725, Ch.13 399.925, Ch.14 399.975.

Joint Task Force-District of Columbia (JTF-DC)

The D.C. National Guard is often active in NSSE events, typically supporting USPP and MPD. The Guard has a [long history](#) of supporting inaugurations.

[JTF-DC](#) provides National Guard support to local civilian authorities. During previous inaugurations, these citizen-soldiers and airmen from other states helped provide traffic control, crowd management and logistical support. The National Guard is home to a wide variety of capabilities that can integrate with other agencies to enhance inaugural support capabilities.



The DCNG personnel use both the [JNCR 380 MHz trunked system](#) and the [DC P25 trunked system](#) in addition to the conventional repeater and simplex channels along with interoperability freqs listed on page 10.

Other DCNG units like the [33rd Civil Support Team](#) assist civil authorities at a domestic chemical, biological, radiological, nuclear and high-yield explosive ([CBRNE](#)) or at a natural or man-made disaster incident site.

Selected DCNG Conventional Freqs

52.7500 s	[150.0]	DC Army Nat'l Guard Helo Ops
139.1500 s	[]	DC ANG 121st FS A-A Discrete
139.4500 s	[]	DC ANG 121st FS A-A Discrete
139.9000 s	[]	DC ANG 121st FS Sup. of Flying
143.1500 s	[]	DC ANG 121st FS A-A Discrete
143.6000 s	[]	DC ANG 121st FS A-A Discrete
234.8000 s	[]	DC ANG 121st FS Sup. of Flying
238.1750 s	[]	DC ANG 121st FS A-A Discrete
246.8000 s	[]	Army National Guard, Air to Air
255.7000 s	[]	Army National Guard, Air to Air
285.2250 s	[]	DC ANG 121st FS A-A Discrete
314.2500 s	[]	DC ANG 201st AS Ops/CP
319.1750 s	[]	DC ANG 121st FS A-A Discrete
340.0500 s	[]	DC ANG 121st FS A-A Discrete
409.3375 r	[\$293]	Downtown D.C (Fed Common)
412.8375 s	[\$293]	Talkaround (Fed Common Use)

DCNG ground troops could use most any unused simplex channel in the 380-400 MHz band, but these have been reported in use previously: 386.2625, 387.5125, 388.675, 389.325, 398.675 and 399.35 all with \$293.

With the help of "Spanner" via [Scan-DC](#), we know that the DCNG talkgroups are in the 400 and 2100 ranges on the [JNCR 380 MHz trunked system](#).

Since September 11, 2001, the [113th Wing](#) of the D.C. Air National Guard has provided 24-hour protective coverage over the NCR. The D.C. Air National Guard is the

most active Aerospace Control Alert (ACA) unit in the country, responding to more alert events than all other ACA units combined. Since the attacks on 9/11, the unit has responded to more than 5,000 alerts.

The 113th personnel operate on the [JNCR 380 MHz trunked system](#) using talkgroups in the 255xx range.

During the 2017 inauguration, DCNG was also active on several talkgroups on the city's P25 network including 2165, 2167, 2179, 2181, 2183, 2185 and 2187.

See RR for info on the [Maryland National Guard](#). Talkgroups for the Virginia National Guard are found under the [Department of Military Affairs](#) on RR which also includes the [Virginia Defense Force with its own freqs](#).

LOCAL GOVERNMENT

As the host city, the District government has its own [in-augural website](#) and will be a major player. The city's [P25 trunked system](#) is a mix of older FDMA digital, commonly used by the fire/EMS radios, while the newer, more spectrum efficient TDMA is used by police. Many talkgroups, but not all, are encrypted.

During previous special events, fire/EMS crews are often assigned to one of several talkgroups regardless of the actual channel designation. Most recently, those TGs have come from the "0A" (zero A) zone.



FEMS has two unencrypted "special event" talkgroups (0A-11/12) along with two encrypted "special event" TGs (0A-13/14). Four SOD talkgroups (0B-11 to 14) are encrypted. Here are the key unencrypted fire/EMS channels to consider.

Selected Unencrypted D.C. Fire/EMS (FEMS) Groups:

101	t	(hex 065)	0-1 Dispatch
102	t	(hex 066)	0-2 Main
700	t	(hex 2BC)	0-3 Incident 10 (main fireground)
728	t	(hex 2D8)	0-11 EMS 1 (east tac)
729	t	(hex 2D9)	0-12 EMS 2 (west tac)
714	t	(hex 2CA)	0A-9 INC41 (special events)
715	t	(hex 2CB)	0A-10 INC42 (special events)
706	t	(hex 2C2)	0A-11 Special Event 1
707	t	(hex 2C3)	0A-12 Special Event 2

The Regional Interoperability Zone (RIZ) is standard in most, if not all, D.C. radios as well as in radios from nearby jurisdictions. Some channels are left blank depending on the user. Talkgroups in this zone will be assigned to specific usages with or without external patches. In past inaugurations, some groups were patched with 851.5125, 159.15 and 168.875. See the mutual aid section on page 10 for info.

The "DC RIZ" ZONE

0166 t (hex 0A6)	1 UCC 1 (Unified Comm. Ctr)
0167 t (hex 0A7)	2 UCC 2
2341 t (hex 925)	3 UCC 3
2343 t (hex 927)	4 UCC 4
3747 t (hex EA3)	5 MA 1 (Mutual Aid 1)
3748 t (hex EA4)	6 MA 2 (DC IO1/159.15 patch)
0621 t (hex 26D)	7 MAF 1 (Mutual Aid Fire 1)
0623 t (hex 26F)	8 MAF 2
2221 t (hex 8AD)	9 EMA 1 (Emer. Mgt. Agcy 1)
2223 t (hex 8AF)	10 EMA 2
2101 t (hex 835)	11 EXEC 1 (sr. city officials)
2103 t (hex 837)	12 EXEC 2 (city officials)
???? t (hex ???)	13 MA S1 (new-Mut Aid secure)
2353 t (hex 931)	14 Spare 1
2355 t (hex 933)	15 Spare 2
1039 t (hex 40F)	16 CW 1 (MPD Citywide)

This mutual aid "MA" zone consisting of only six talkgroups is limited to police radios only.

MPD "MA" ZONE (MPD only)

3748 t (hex EA4)	1 DC IO1/MA 2 (159.15 patch)
1201 t (hex 4B1)	2 DC MIRS (police mut aid patch)
3749 t (hex EA5)	3 DC MA 3 (Mutual Aid, police)
3750 t (hex EA6)	4 DC MA 4
1312 t (hex 520)	5 US Capitol PD 1
1314 t (hex 522)	6 US Capitol PD 2

Other D.C. police talkgroups are encrypted with the exception of those shown in this newsletter. Here are other key unencrypted D.C. talkgroups beyond those previously listed. Expect many other talkgroups in use that are seldom used, such as those from DDOT, DHS, DPW, Health Dept. and HSEMA. These are in the 2000-2500 range.



0122 t (hex 07A)	DC Radio Cache
0624 t (hex 270)	MAF 3 (Mutual Aid Fire 3)
0627 t (hex 273)	MAF 4
0744 t (hex 2E8)	DC MIC-1 (marine coord)
0746 t (hex 2EA)	DC MIC-2 (marine coord)
0747 t (hex 2EB)	DC MIC-3 (marine coord)
1316 t (hex 524)	TF2 DC Clear (see page 11)
1533 t (hex 5FD)	WMATA 1 (Metro Transit PD 1)
1535 t (hex 5FF)	WMATA 2 (Metro Transit PD 2)
2099 t (hex 833)	Health Dept.
2117 t (hex 845)	Homeland Sec-Emer Mngt Agcy
2151 t (hex 867)	Human Services Dept.
2169 t (hex 879)	DCRA Inspectors
2177 t (hex 881)	Protective Svcs (bldg security)
2179 t (hex 883)	National Guard (bldg security)
2225 t (hex 8B1)	TMC-Traffic Management Center
2305 t (hex 901)	Health Dept-Emg Healthcare Net
2505 t (hex 9C9)	For-Hire Vehicles Inspectors

The Red Cross has a slew of freqs licensed for use nationwide. The organization often aids people who require medical or other assistance during large events.



Those ARC freqs reported previously used in D.C. by [Dave Schoenberger](#) appear here. Also try 453.0125, 453.525, 464.025, 464.6, 464.625, 464.65, 464.7, 464.725 and 464.75.

American Red Cross

47.4200 s [varies]	American Red Cross
453.4250 r/s [d266]	American Red Cross
453.4750 r/s [146.2]	American Red Cross
462.3750 r/s [88.5]	Mont. Co. Emer. Comm. Agency
462.4000 r/s [d226]	Mont. Co. Emer. Comm. Agency
464.7500 r/s [146.2]	American Red Cross, Arl. Co.

Because of their proximity to downtown D.C., worth mentioning are the [Virginia STARS](#), [Arlington County P25](#) and [Fairfax County P25](#) trunked systems.

Virginia STARS P25-Arl. Co.(19E-0113) [NAC \$190]:
152.2175, [152.5325](#), [158.8275](#), 159.195, 159.2625.

Key STARS Groups in VSP Div. 7

00065t (hex 0041)	VSP Fairfax Ch.1
00067t (hex 0043)	VSP Fairfax Ch.2
00104t (hex 0068)	VSP Fairfax Ch.3 (spec use)
00070t (hex 0046)	VSP Blue 7 (working ch.)
06146t (hex 1802)	VSP Mut Call 7 (link to VSP disp)
06147t (hex 1803)	ComLinc 7 (external-STARS link)
06148t (hex 1804)	STARS Mutual 7 (mutual aid)
06149t (hex 1805)	VSP-InOp-LE-7 (law enfo int-ops)
06150t (hex 1806)	VSP-InOp-PS-7 (pub svc int-ops)
06747t (hex 1A5B)	7th Dist. Traffic Ops Center
155.1075 s []	VSP 2021 Inaugural Special STA

David Schoenberger had confirmed STARS talkgroup 4525 in use during the 2013 inauguration by the Virginia Dept. of Military Affairs. Richard Rowland says 4529 is used by the DMA helicopters for flight following. Also try DMA on 4517, 4520, 4521, 4524, 4528, 4566 and 4567.

The Commonwealth has licensed 800 MHz trans-portable trunked sites that connect to the STARS network. Excluding mutual aid channels, these include 31 channels. According to the FCC license, [WQOG986](#), none are authorized for use in the D.C. area.

The Arlington County [coordination and OEM talkgroups](#) are good candidates for inaugural details. Also try the alternate police and fire/EMS groups.

During the 2017 inauguration, Fairfax Co had some inaugural activity on its [coordination talkgroups](#). The county's USAR team may also be staging on FD TGs.

Prince George's County police typically use the "SOD OP 3" talkgroup (95 dec/5F hex) for motorcades to/from Joint Base Andrews. The [16 special event talkgroups](#) would be obvious candidates for any inaugural activity.

The [Maryland FiRST](#) network has increased coverage in the D.C. suburbs with a [Prince George's County simulcast](#). The state also has a transportable statewide trunk site that operates on FiRST but with a WACN of 'BF7CC' on 769.23125, 769.38125, 769.73125, 769.88125, 774.51875 and 774.86875.

INTEROPERABILITY / MUTUAL AID CHANNELS

Each jurisdiction in the D.C. area has a "cache" of spare 700/800 MHz radios for use during emergencies and special events. These radios are programmed with local jurisdictions' trunked and conventional channels as well as national and local interoperability (IO) channels.

The national IO channel assignments are shown in the [National Interoperability Field Operations Guide](#) (NIFOG).

More than 80 channels have been nationally designated for IO/mutual aid use. In addition, the D.C. area has its own channels as noted here.



Repeated channels are given an "R" suffix while "D" is used to denote direct/simplex (ex. 8TAC91-D). "C" indicates it is unencrypted. Unless otherwise noted, all channels in this section are analog with a CTCSS of 156.7 Hz or carrier squelch.

U.S. Park PD, MPD and Secret Service use 158.85 with VIP motorcades, typically by motorcycle officers escorting the President. It is patched with MPD's SD4-SEC.

Locally Used IO Channels

123.0250 s Helicopter Air-to-Air Common
 154.2800 s Fire Mutual Aid 2 (VFIRE21)
 154.2950 s Fire Mutual Aid 1 (VFIRE23)
 155.4750 s National Law Enfo Emer Freq (VLAW31)
 158.8500 r [\$001] SD4/Motorcade Patch (156.09 in)
 462.4000 r D.C. Hospital Mutual Aid [CTCSS 77.0]

Several repeaters in UHF, 700 and 800 MHz (both National and RINS) have been activated for this event and could support units with radios that do not have access to local talkgroups.

National 800 MHz mutual aid "GX" chs.

851.0125 r/s National Calling Ch (8CALL90)
 851.5125 r/s National Tac 1 (8TAC91)
 852.0125 r/s National Tac 2 (8TAC92)
 852.5125 r/s National Tac 3 (8TAC93)
 853.0125 r/s National Tac 4 (8TAC94)

Some repeaters are patched with selected D.C. RIZ/MA talkgroups or 159.15 and 167.25. They are also used without a patch or simplex for specific purposes.

The D.C. P-MARS and Regional Inter-Service "RINS" channels were created by the Council of Governments (COG). RINS channels may also be used by any COG member for digital or analog intra-agency communication without the 156.7 Hz tone; typically in simplex mode.



851.3625 r D.C. Police Mutual Aid (P-MARS)
 853.5125 r/s Regional Inter-Service (RINS1)
 851.8375 r/s Regional Inter-Service (RINS2)
 852.2375 r/s Regional Inter-Service (RINS3)
 852.4875 r/s Regional Inter-Service (RINS4)
 851.8625 r/s Regional Inter-Service (RINS5)
 852.7625 r/s Regional Inter-Service (RINS6)

These IO channels are funded by the Justice Department and are known appropriately as the "25 Cities Project" channels. See this [MT blog for details](#). They are used only by law enforcement in the D.C. area. DC IO LE2 was originally 168.875 but has been changed to 167.25 which is the federal law enfo "LE 2" IO channel.

D.C.'s "25 Cities" IO Channels

159.1500 r [\$653] DC IO LE1 (155.25 in)
 167.2500 r [\$68F] DC IO LE2 (164.7125 in)

These channels are intended for joint incident response (IR) and law enforcement (LE) by federal and civilian agencies.

VHF Federal IR Chs. (Zone IO-3 in Justice Dept. radios)

169.5375 r/s [167.9] NC 1 (calling)/IR 5 (164.7125 in)
 170.0125 r/s [167.9] IR 1/IR 6 (165.25 in)
 170.4125 r/s [167.9] IR 2/IR 7 (165.9625 in)
 170.6875 r/s [167.9] IR 3/IR 8 (166.575 in)
 173.0375 r/s [167.9] IR 4/IR 9 (167.325 in)

VHF Federal LE Chs. (Zone IO-5 in Justice Dept. radio)

167.0875 s [167.9] LE A (calling channel)
 167.0875 r [167.9] LE 1 (162.0875 in)
 167.2500 r/s [\$68F] LE 2/LE 6 (162.2625 in)
 167.7500 r/s [\$68F] LE 3/LE 7 (162.8375 in)
 168.1125 r/s [\$68F] LE 4/LE 8 (163.2875 in)
 168.4625 r/s [\$68F] LE 5/LE 9 (163.425 in)

UHF Federal IR Chs. (Zone IO-4 in Justice Dept. radios)

410.2375 r/s [167.9] NC 2 (calling)/IR 15 (419.2375 in)
 410.4375 r/s [167.9] IR 10/IR 16 (419.4375 in)
 410.6375 r/s [167.9] IR 11/IR 17 (419.6375 in)
 410.8375 r/s [167.9] IR 12/IR 18 (419.8375 in)
 413.1875 s [167.9] IR 13
 413.2125 s [167.9] IR 14

UHF Federal LE Chs. (Zone IO-6 in Justice Dept. radio)

414.0375 s [167.9] LE B (calling channel)
 409.9875 r/s [167.9] LE 10/LE 16 (418.9875 in)
 410.1875 r/s [\$68F] LE 11/LE 17 (419.1875 in)
 410.6125 r/s [\$68F] LE 12/LE 18 (419.6125 in)
 414.0625 s [\$68F] LE 13
 414.3125 s [\$68F] LE 14
 414.3375 s [\$68F] LE 15

UHF Non-Federal National IO Repeater Chs.

453.2125 r/s [156.7] UCALL40/D (calling channel)
 453.4625 r/s [156.7] UTAC41/D
 453.7125 r/s [156.7] UTAC42/D
 453.8625 r/s [156.7] UTAC43/D

Forty 700 MHz frequency pairs have been designated as national IO channels. See pages 43-50 of the [NIFOG](#) for the frequencies. These are the zones that appear in D.C. fire/EMS and police radios although it does not include all of the 700 MHz IO channels.

MA71 700 NAT50 (general public safety)

769.24375 r/s [\$293] 7CALL50R/D
 769.14375 r/s [\$293] 7TAC51R/D
 769.64375 r/s [\$293] 7TAC52R/D
 770.14375 r/s [\$293] 7TAC53R/D
 770.64375 r/s [\$293] 7TAC54R/D
 769.74375 r/s [\$293] 7TAC55R/D
 770.24375 r/s [\$293] 7TAC56R/D
 770.99375 r/s [\$293] 7GTAC57R/D (other pub svc)

MA72 700 NAT70 (general public safety)

773.25625 r/s [\$293] 7CALL70R/D
 773.10625 r/s [\$293] 7TAC71R/D *
 773.60625 r/s [\$293] 7TAC72R/D *
 774.10625 r/s [\$293] 7TAC73R/D *
 774.60625 r/s [\$293] 7TAC74R/D *
 773.75625 r/s [\$293] 7TAC75R/D *
 774.25625 r/s [\$293] 7TAC76R/D *
 774.85625 r/s [\$293] 7GTAC77R/D (other pub svc)

* Last month, D.C. [licensed](#) these six repeater channels for use at the Washington Monument.

Police radios in the D.C. area are programmed with two "task force" zones. The first zone features 16 700 MHz IO channels in simplex mode. Only the first four channels in the TF1 zone, below, are unencrypted. They are available to all regional law enforcers. The remaining 12 simplex channels in the TF1 zone — 7TAC51 to 56 and 7TAC71 to 76 — are encrypted, intended for use by regional task forces and SWAT teams.

MA73 700 National Law Enfo/Task Force 1 "TF1" Zone

770.39375 r/s [\$293] 7LAW61R/D
 770.49375 r/s [\$293] 7LAW62R/D
 774.00625 r/s [\$293] 7LAW81R/D
 774.35625 r/s [\$293] 7LAW82R/D

Also worth mentioning is the regional task force "TF2" zone. In that zone, D.C., Fairfax, Montgomery and Prince George's each contribute an unencrypted talkgroup from their respective systems along with two encrypted talkgroups, one AES and one DES. As noted on page 9, "TF2 DC CLEAR" is 1316. "TF2 DC SEC 1" and "TF2 DC SEC 2" are 1317 and 1318. The other jurisdictions' sets probably will be of limited use because of their tower locations.

MA74 700 NATFR (fire/EMS)

769.89375 r/s [\$293] 7FIRE63R/D
 769.99375 r/s [\$293] 7FIRE64R/D
 769.39375 r/s [\$293] 7MED65R/D
 769.49375 r/s [\$293] 7MED66R/D
 773.50625 r/s [\$293] 7FIRE83R/D
 773.85625 r/s [\$293] 7FIRE84R/D
 773.00625 r/s [\$293] 7MED86R/D
 773.35625 r/s [\$293] 7MED87R/D

Per the request of the [National Public Safety Telecommunications Council](#), the FCC set aside six 700 MHz channels (769.23125, 769.38125, 769.73125, 769.88125, 774.51875 and 774.86875) for use with nationwide deployable trunked systems. It appears these would only be available outside the T-band metro areas, beyond Washington, D.C, without special authorization.

TRANSPORTATION

The inaugural [joint transportation plan](#) is now online!

The new Washington Metropolitan Area Transit Authority (WMATA) P25 system is on the air but not expected to be used for the inauguration. In the meantime, WMATA remains on its Motorola trunked system. See [RadioReference](#) for info.



WMATA has now encrypted all LE traffic on the old system but they have two unencrypted patch channels on the DC P25 network (page 9).

Amtrak and Union Station

160.2900 r [114.8] Ch.1 Yardmaster (161.37 in)
 160.3500 r [114.8] Ch.2 Train Maint (161.145 in)
 160.4400 r [114.8] Ch.3 Station Svcs (161.445 in)
 160.6350 r [151.4] Amtrak
 160.9200 s [None] Amtrak Road, Northeast Corridor
 160.9950 r [d023] Amtrak Engineering
 161.2950 r [192.8] Amtrak PD (160.665/160.365 in)
 161.2050 s [146.2] Amtrak Police (car to car)
 173.3750 s [146.2/203.5] Amtrak Police CID/PTL
 464.5750 r [d346] Shops - Security Primary
 464.5250 r [d311] Shops - Security Alternate
 464.9250 s [d311] Shops - Security Alternate

See [David Schoenberger's website](#) for Union Station.

Metropolitan Washington Airports Authority (MWAA)

MWAA is the authority that runs Reagan and Dulles airports. It has migrated to a [P25 trunked system](#).

NEWS MEDIA

These frequencies are those commonly used by D.C. news crews when they still use radio! Additional freqs and ranges for broadcasters have been authorized under [this STA](#) for this event. Most will come from the UHF-TV band starting at Ch.16 (482.0 MHz) and they tend to be used most often for intercom systems (PL), program audio with cues (IFB) and wireless mics.



Louis Libin's company [broad-comm.com](#) is coordinating these frequency bands used by the broadcasters. He says this inauguration is significant because of the unprecedented technical cooperation among the broadcasters, law enforcement and federal agencies.

"For the first time," Louis said, "we are in complete coordination with the new Spectrum De-confliction Committee run by the Secret Service, DHS and the FCC."

"I am working hard to make this relationship continue on well after this event," he added, noting that "we operate in the same spectrum but we don't even know each other's use, case and acronyms!"

RF War Games Scheduled for this Monday morning!

An RF rehearsal is scheduled for Monday starting around 10 a.m. "Because of the pandemic and the dynamic security and lockdown in D.C.," Louis pointed out, "coordination of Monday's RF war games and the inauguration will be done remotely. It's a first, but we are living through crazy times," he added.

During previous inaugurations, a media coordination repeater was used. In 2013 it operated on 450.95 and on 500.625 in 2017. We do not expect one this time.

Several outlets have dismantled their radio networks and are rebuilding now to support the inauguration. ABC and CNN also use DMR systems, and there are likely others we have yet to discover.

One news helicopter, *Chopper 1* ([N111TV](#)), provides video to WTTG, WJLA and WUSA. WUSA controls it this month.



WRC has its own helicopter, *News 1* ([N98CL](#)).

Local TV and Radio Stations

WRC NBC4- [d331/d306] 153.05-Desk/Helo; 450.45-Ch.1 Eng; 455.15-Ch.3 IFB (see NBC for Chs.2/4-6)

WTTG Fox5- [88.5/CSQ] 161.73-Desk/Eng/Helo.

WJLA ABC7- [d311] 450.1125r/s-Chs.1/3 Desk; 450.2625r/s-Chs.2/4 Eng./Helo; 455.55-Ch.5 Bldg. Ops.

WUSA CBS9- [141.3] 450.75-Ch.1 alt; 450.2125-Ch.2 alt; 450.0875-Ch.3 Eng./Helo.; 450.1875r-Ch.4 Desk

WMAL 105.9- [82.5/CSQ] 450.2375, 450.65, 455.2375

WTOP 103.5- [141.3/CSQ] 450.35, 455.65. Also 502.2, 502.225, 502.25, 502.275, 502.3 and 502.325 WTOP-OBO 2-way radios.

Television Networks

ABC- [136.5] 450.4125-IFB, 450.5875/455.5875, 450.65, 450.7875/455.7875, 450.85-IFB, 450.9625/455.9625, 455.0875-IFB, 455.25, 455.35, 455.5375, 455.7, 455.8125, DMR-461.8875r/496.0375s and 464.025s.

CBS- [107.2/CSQ] 450.05, 450.15, 450.2875/455.2875, 450.4875/455.4875, 450.5125/455.5125, 450.6125-IFB/455.6125, 450.7125, 450.75, 450.8-IFB/455.8, 455.0375, 455.2625.

NBC- [d331/d306/82.5] 161.67-Desk; 450.55-Ch.2 IFB/455.55; 455.85-Ch.4 IFB; 450.3125-Ch.5, 455.3125-Ch.6, 450.5375/455.5375, 450.5625, 450.6625, 450.7625, 450.8625 and 455.3625. Also see WRC.

Cable Networks

CNN- DMR [network](#) on 452.7, 462.275 and 464.9625. CNN will also need analog channels such as 450.1875, 450.675, 450.775, 450.8875 that were used previously.

C-SPAN- [d165] 450.5625/455.5625.

Fox News- The Fox Washington Bureau holds a license ([WPLR211](#)) for four repeater and four simplex channels which we have yet to confirm in use. They are: 461.025r, 461.05r, 461.075, 461.1, 461.125, 461.15, 464.5r and 464.55r.

Another Fox News license ([WRFK249](#)) is for 451.6125/456.6125, 451.7125, 452.2875/457.2875, 461.575r, 462.3r, 463.35r and 463.85r. Fox techs had used an [expired license](#) for 495.4375r and 495.4625r [both d243] in years past.

Other Media

ABC Radio– 450.65, 450.85, 455.35 and 455.7.

VOA- 412.2125, 412.2375, 412.775, 412.8125. See [Chris Parris' blog](#) for other USIA/VOA channels.

Washington Post- The *Post* is licensed ([WRDT227](#)) on 451.6875, 452.0875/457.0875 and 462.2625/467.2625 (use unknown). In previous years, the *Post* had a city-wide repeater on 860.1875 [d054] and used 855.7625 [d054] within the 15th Street complex and at the Springfield plant. 853.1375 was licensed as well.

Westwood One– 450.2375/455.2375.

PRESIDENTIAL INAUGURAL COMMITTEE (PIC) AND INAUGURAL EVENT SITES

For official inaugural events, see the [59th Presidential Inaugural Committee \(PIC\)](#) website. In 2017, [BearCom](#) filed an STA for a temporary UHF DMR system ([WQYS630](#)) and [Blanchard Communications applied](#) for 70 UHF [freqs](#) for inaugural events. We have not seen any similar STAs reported as of yet.



Important sites during past inaugurations for sanctioned events included the Walter E. Washington Convention Center which is currently a Covid field hospital, D.C. Armory, Union Station, various hotels, Washington National Cathedral and sites along the parade route such as the Canadian Embassy and the old Newseum.

See David Schoenberger's [website](#) for info on each venue. In previous inaugurations, several buildings were designated for use as emergency shelters. Freqs for many of these facilities are on his website as well. In addition, his superb listing of verified frequencies for downtown D.C. includes more than 60 hotels!

MONITORING PROTESTER COMMS

Despite the popularity of smartphones and apps, cellular networks are at times overwhelmed. Zello has also removed some channels allegedly used by protesters.

So organized protest groups continue to use various frequencies associated with [FRS](#), [GMRS](#), [MURS](#), [itinerant channels](#) and the [Cheap Chinese Radios](#) including these [Baofeng radio presets](#).

During recent protests, activists have also been actively using local 2-meter and 440 MHz ham and GMRS repeaters active in the area even if they are not licensed.

They may even use the radios right out of the box on default frequencies without reprogramming them! See this [RadioReference link](#) and this [other page](#) for more candidate freqs.



Some protest groups also make use of [mesh network apps](#) for smartphones which do not rely on the cellular network.

This [audio file](#) is from the [April 16, 2000, IMF/World Bank protest](#) which shows just how organized demonstrators can be using FRS radios.

PLEASE JOIN US ON ZOOM ON JAN. 24!!!

In lieu of our annual get-together,

zoom

we have an online Zoom meeting scheduled for Sunday, Jan. 24. We can discuss what we learned from monitoring the 2021 Inauguration, scanning in times of crisis and general chit chat.

If anyone has a short presentation they wish to make or a particular topic they wish to discuss, please let us know.

The chat is limited to 100 users and 45 minutes for a free session. We may be able to make this a regular event if this works smoothly.

Meeting details:

Jan 24, 2021, 1 p.m., Eastern Time

To join the Zoom Meeting:

<https://us05web.zoom.us/j/8902619086?pwd=M3lDaGNrb2JwNFR0S054TOYrTnRXdz09>

Meeting ID: 890 261 9086

Passcode: 09UUwD

LOOKING FOR AN EXCITING D.C. TELECOM JOB?

One local company is searching for a full-time LMR technician to maintain TRBO/DMR or P25/Astro networks or to install radio gear in vehicles or commercial buildings. Also needed is anyone who has data center cabling experience. Please contact [Alan](#) for more info.



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This is the 2021 CHM Inauguration Edition!
CHM ZOOM CHAT SCHEDULED
NEXT SUNDAY, Jan. 24, 2021.



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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