ScannerDigest Newsletter

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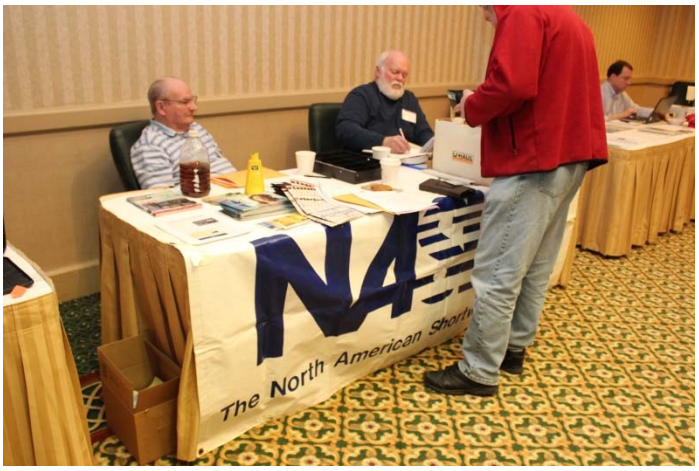
Another year has passed and once again SWL enthusiasts gathered from around the world to attend the Annual SWL WinterFest 2015 held in Plymouth Meeting PA



Sponsored by the NASWA.

Richard Cuff & John Figliozzi.

The Winter SWL Fest is a conference of radio hobbyists of all stripes, from DC to daylight. Every year scores of hobbyists descend on the Philadelphia, Pennsylvania suburbs for a weekend of camaraderie. The Fest is sponsored by NASWA, the North American Shortwave Association, but it covers much more than just shortwave; mediumwave (AM), scanning, satellite TV, and pirate broadcasting are among the other topics that the Fest covers. Whether you've been to every Fest (all 26, starting with the first year at the fabled Pink & Purple Room of the Fiesta Motor Inn) or this year's will be your first, you're sure to find a welcome from your fellow hobbyists.

History of the Winter SWL Festival

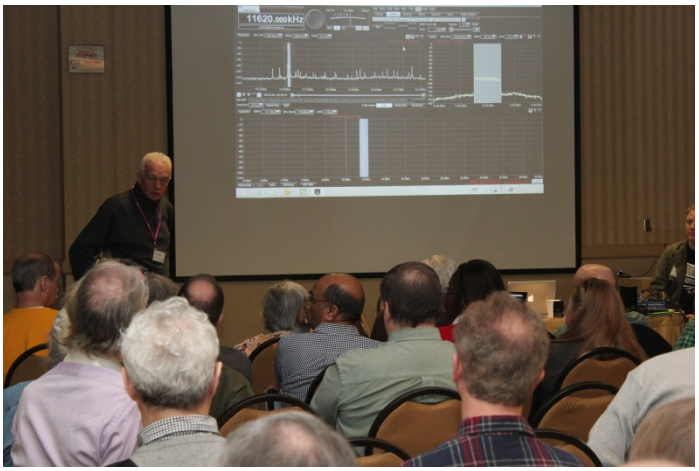
It was in February 1988 that a group of 40 DXers assembled at the Fiesta Motor Inn in Willow Grove, PA to "just talk radio." The first Fest was held in the "beautiful pink and purple Pancho Villa Room" at the Fiesta and featured a blizzard and a shooting in the motel restaurant (not a participant!).

The next year the Fest moved to Kulpsville, PA; established a major program effort, and launched the Hospitality Room. As time has passed, the Fest has spawned the Scanner Scum, Father John's DXers' prayers, Mr. and Mrs. Hospitality, and the Voice of Pancho Villa (if one were to know such things).

From the 13th Fest, NASWA assumed the responsibility of Fest organization from the "gang of three" (Bob Brown, Dr. Harold Cones and Kris Field), and the pair formerly known as "Mr. and Mrs. Hospitality", John Figliozzi and Richard Cuff, stepped in as the Organizing Committee, filling the enormous shoes of the gang of three. In spite of its growth, the Fest retains a family reunion atmosphere, and the central mission remains the same: To provide a place to relax and "just talk radio."

Seminars: **Time Travel, Teleportation & Spectrum Hoarding for the Contemporary DXer by** Thomas Witherspoon

Software-defined radios (SDR) have revolutionized radio monitoring providing DXers with receiving options that were only theoretically possible a few years ago.
Mark has travelled to exotic Pacific and Indian Ocean locations with SDRs to capture the local medium and shortwave spectrum and enable others to experience a listening session in a location to which they may never physically travel. Thomas and Mark will demonstrate and present the recording techniques used and the plans to record spectrum further afield in the coming year.



Seminar by Mark Fahey.

The Annual Spectacular Shortwave Shindig with David Goren! David Goren seen above as broadcasting live via internet to a shortwave station in Florida.

Including a live, hour-long broadcast over WRMI, Radio Miami International, on 7570 kHz. from 0300-0400 GMT/UTC (Saturday), 2200-2300 EST (Friday) beamed 315 degrees from Okeechobee, Florida.

Vintage shortwave receivers on display. Fine-tuning a DX station.

A GUIDE TO PUBLIC SERVICE SCANNING FOR VENTURA COUNTY, CALIFORNIA

Part 2 by Larry T. Smith

FEDERAL GOVERNMENT

CHANNEL ISLANDS NATIONAL PARK (CINP) - 171.700R & 167.175R (both multiple tones)

COAST GUARD (CG) & OTHER MARINE RELATED FREQUENCIES

MHz	Tone	
155.145	136.5	Channel Islands Harbor Patrol (internal operations)
155.145	136.5	Ventura County Life Guards
156.300 CH 6	None	Port Hueneme Navy Control/CG to public (for those without CH 22)
156.600 CH 12	None	CG, Channel Islands Harbor Patrol & Ventura Harbor Patrol to the public
156.700 CH 14	None	Port Hueneme Wharfinger
156.800 CH 16	None	Calling & Distress
156.850 CH 17	None	Ventura Port District (internal operations)
157.050 CH 21	None	Channel Islands CG tactical
157.100 CH 22	None	CG Liaison with boaters (Oxnard FD to CG)
157.175 CH 83	None	CG Working/Auxiliary FBI
167.6125 R		Ventura Office (rarely used in clear or digital)

HOPER MOUNTAIN NATIONAL WILDLIFE REFUGE COMPLEX

163.150 R	146.2	Sespe Condor Sanctuary
163.150 M	146.2	Sespe Condor Sanctuary (Direct)

LOS PADRES NATIONAL FOREST (LPNF)

122.575	None	Air Operations
123.075	None	Helo operations (usually)
168.2625	Unk	Tac 3
170.4625 R	Multi	Forest Net (Flight follow County helos/Liaison with County)
171.550 R	Multi	F2 Admin Net
172.350	103.5	Tac 2
170.000	None	Air/ground coordination
166.675	None	Air Tactics F1 (fixed wing)

NAVY BASE VENTURA COUNTY (Point Mugu/Port Hueneme)

NBVC Security/Fire moved to U.S. DoD Project 25 Trunked/Digital System, Site 509, 381.725c in June 2011.

NOAA (Oxnard Forecast Office)

410.100	None	Link Oxnard/Broadcast Peak (Santa Barbara County) for 162.400
415.900	None	Link Oxnard/Broadcast Peak for
162.475		(Marine WX)

SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA

169.7875 R	127.3	Conejo Extender
171.725 R	110.9	Laguna Peak
172.525 R	110.9	Castro Peak

CALIFORNIA CALTRANS (Tone is 110.9)

856.9875 M	CH A - Direct
856.9875 R	CH A - Tx: Camarillo
857.9875 R	CH J - Tx: South Mountain
858.9875 R	CH I - Tx Red Mountain
859.7375 R	CH G -Construction Tx: South

Mountain

859.7375 M	CH G - Direct (Flagmen)
859.9875 R	CH F - Tx: Red Mountain
860.7375 R	CH B - Tx: Sisar
860.9875 BR	CH E - Oxnard (Rare)

CALIFORNIA HIGHWAY PATROL (Tone is 167.9)

The Ventura Dispatch Center dispatches for the Ventura Office (#31), the Moorpark Office (#54) and the Conejo Inspection Facility (#137).

42.400	B/R	Dispatch <Purple> (Repeats 42.160 at discretion of dispatch.)
42.400	M	<Purple> C/C
42.160	M	<Purple> units to dispatch
42.340	B	Secondary Dispatch <Blue>
42.340	M	<Blue> C/C
42.180	M	<Blue> units to dispatch
154.905	M	Mobile extenders

DEPT. OF JUSTICE

154.680	M	94.8	Multi-agency narcotics efforts

DIVISION OF FORESTRY (CDF)

151.220	M	None	CDF Air/Ground
151.280	M	None	CDF Air Tactics 4 (old blue)
151.295	M	None	CDF Air Tactics 5 (old green)
151.310	M	None	CDF Air Tactics 6 (old yellow)
151.355	R	136.5	CDF-1: Camarillo Camp & units (repeat & direct); San Luis Obispo
155.055	B/M	131.8	CDF Camarillo Camp.
169.125	M	None	CA Travel Net (Federal/state/county en route)

FISH & GAME

151.430 R	Multi	S. Calif (also direct)

PARKS & RECREATION (Tone is D115)

855.7375 R	Oxnard north to Gaviota
866.4625 R	Pt. Mugu State Park (Supposedly; can't verify from home.)
868.5625 R	Leo Carrillo area

OFFICE OF EMERGENCY SERVICES (Tone is 192.8)

153.755 R	CA Office of Emergency Services (OES) - multiple users (rare)
153.755 M	OES - Direct (Fire units en route & on scene)

STATE UNIVERSITY, CHANNEL ISLANDS

(Camarillo) (Tone is 71.9)

154.740 R	Campus Police (Station 16) - Law Enforcement
155.595 R	Campus Police - Escort/Parking/Traffic

YOUTH AUTHORITY (Camarillo)* (Tone is 131.80

155.505	External operations
854.9625 R	Security/Operations**
859.2625 R	No mobiles

*Comms Center simulcast on all 3 frequencies.
**This is the one to listen

VENTURA COUNTY

AIR OPERATIONS - 129.950

FIRE (County Unified Fire Channel Plan)

155.055	82.5	CH 1 Dispatch
154.325R	79.7	CH 2 CMD 2/Brush Cmd
153.950	167.9	CH 3 TAC 3/Brush Tac
154.295	156.7	CH 4 WHITE 3/Mutual Aid

Tac/Crews

153.875R	85.4	CH 5 CMD 5/West Cmd
154.025	167.9	CH 6 TAC 6/West Tac
154.265	167.9	CH 7 WHITE 2/Mutual Aid

Tac

155.985R	186.2	CH 8 CMD 8/East Cmd
153.830	100.0	CH 9 TAC 9/East Tac
154.3025	156.7	CH 10 Tac 10
154.235	167.9	CH 11 VNC A/G
154.280	156.7	CH 12 WHITE 1/Mutual Aid

Command

154.070	123.0	CH 14 Oxnard FD/CMD Rpt
154.145	123.0	CH 16 Oxnard FD DISP Rpt
159.180	67.0	CH 17 Mobile Rptr (Limited use, mountainous areas)
154.205 100.0	CH 18	Fillmore VFD Tactical
159.150 R	100.0	CH 19 LARTS/Oat Mtn
159.180 R	100.0	CH 20 LARTS/Castro Pk
170.550 R	103.5	CH 22/23/24 LPNF Forest

Net (Torrey/Sisar/Frazier)

170.475 M	103.5	CH 25 LPNF TAC
155.205	103.5	CH 60 MED1 (Dormant)
155.355	103.5	CH 61 MED 2/Ambulance-

Hospital (rare)

155.385	103.5	CH 62 MED 3/Ambulance-Hospital (rare)
155.175	103.5	CH 63 MED 4 (Disaster simulation summer 06)
155.025	103.5	CH 64 MED5 (Dormant)
154.400 B/M	151.4	CH 79 LAC TAC 19 (A/G)
154.340 M	151.4	CH 88 LAC TAC 18
154.415	110.9	CH 40 CMD repeater
	151.4	CH 89 LAC TAC
154.430	151.4	CH 90 LAC TAC 17

SHERIFF (Station 1)

151.130 R	151.4	F1 West Dispatch
155.535 R	107.2	F2 Records/Tac
156.150 R	123.0	F3 East Dispatch
159.210	110.9	F4 CMD 4
158.730	100.0	F5 C/C - Tac
156.015	100.0	F6 C/C (All county agencies/Channel # varies/agency)
155.145 R	100.0	F7 Custody (Main Jail)
154.920	156.7	F8 CLEMARS/CA LAW 1 C/C (All county agencies. Channel # varies/agency)

Ventura County SO Academy (Camarillo Airport)

155.475	156.7	F9 NALEMARS C/C
155.160 M&R	100.0	F10 Search & Rescue
151.070 R	79.7	F11 Search & Rescue
151.055R	206.5	SO Disp/Lockwood Valley
158.730 R	173.8	Station 11/Lockwood Valley
155.145	136.5	Channel Island Harbor

Master/County Lifeguards

154.680	67.0	Narcotics Task Force
156.075	CSQ	CALCORD
156.195	173.8	Undercover
856.4625 R	67.0	Todd Road Jail - F1/Operations
860.4625 R	67.0	Todd Road Jail - F3/Maintenance
860.4625 R	79.7	El Rio Juvenile Facility - F3/Secondary
860.9625 R	77.0	Ventura County Juvenile Facility - Court Operations/Bailiffs
860.9625 R	100.0	County Govt. Center - Court Operations/Bailiffs Dispatch
860.9625 R	141.3	County Govt. Center - Detainee Escort
866.7000 R	103.5	El Rio Juvenile Center - F1 Primary

OTHER COUNTY AGENCIES

151.010 M	71.9	Roads - Crews
151.025 R	141.3	Flood Control/Roads/Garage
151.085 M	74.4	Roads - Crews
151.130 M	D043	Roads - Crews
153.785 R	Multi	Port Hueneme Local Govt (67.0)/ Probation & Work Release (127.3)
153.815 R	Multi	Agriculture (123.0)/Water (Aqua/141.3)/Moorpark LG (162.2)
153.845 R	Multi	Animal Control (127.3)/Parks* (162.2)/Radio Service* *Very rare.
453.550	123.0	Government Center - Security
453.550 R	141.3	Ventura County Medical Center/Ventura

CITIES

CAMARILLO
Fire - County Fire (50 series units)
Local Govt. - 154.965 R (100.0)
Police - VCSO (Station 12/Units 8+)

FILLMORE
Fire – 154.205 (100.0) (Dispatched on County Fire F1) (90 series units)
Local Govt. - 159.105 (Unk) (Not heard in years. Still licensed.)
Police - VCSO (Station 5/Units 6+)

MOORPARK
Fire - County Fire (40 series units)
Local Govt. - 153.815R (162.2) (County frequency)
Police - VCSO (Station 13/Units 2+)

OJAI
Fire - County Fire (20 series units)
Local Govt. - 159.105 (100.0)
Police - VCSO (Station 6/Units 1+)

OXNARD
Fire (60 series units)

154.145 R	141.3	F1/F2

154.070 R 123.0 F3/F4 (F1 & F3 are repeaters)
153.890 M 107.2 F5 (Training) Housing Authority -
453.950 R (103.5) Local Govt. –
153.965 R (100.0) Police - Station 3 (all 100.0 unless otherwise noted)
155.745 R - F1 Dispatch
154.785 R - F2 Enforcement/Records
155.655 R - 118.8 - F 3 Tac/Command

Post/Training & C/C
154.920 - F4 CLEMARS (C/C tac)
156.015 - F5 Countywide (C/C tac)
155.475 - F6 NALEMARS (C/C tac)
156.075 - F7 CALCORD (C/C tac)
154.815 - F8 Tac/Training/Undercover (Rare)

PORT HUENEME
Fire - County Fire (Station 53)
Local Govt. - 153.785 R (67.0) (County frequency)
Police - Station 8
158.880 R N175 F1 Dispatch
155.745 R 100.0 F? Oxnard PD F1
F4-F7 (Should be same as Oxnard)

SANTA PAULA
Fire - Dispatched on County Fire F1 (80 series units)
Local Govt. (all 141.3)
159.105 - Dormant (was refuse)
159.165 - Public Works (Water)
Police - Station 4 (all 100.0)
158.835 R - F1 Dispatch
158.835 - F2 Talk-around
F4-F7 See Oxnard (Not all heard, but supposed capability)

SIMI VALLEY
Fire - County Fire (40 series units)
Local Govt. (All P25 = NAC 465)
453.050 R P25 Local Govt.
453.200 D065 Rancho Simi Park & Recreation District
453.700 R P25 Transit/Dial-A-Ride D465
453.525 R P25 School Crossing Guards
Police- Station 9 (all P25/NAC 465)
453.9250 R - F1 Dispatch
482.4125 R - F2
482.6125 R - F3
460.025 R - F4 CLEMARS
453.350 R - F5 (Not Heard)

THOUSAND OAKS
Fire - County Fire (30 series units)
Local Govt. - 154.115 R (127.3)
Police - VCSO (Units 9+)

VENTURA
Fire (Dispatched on County Fire CH 1) (10 series units)
Housing Authority - 153.935 (Can't verify at home. In FCC records.)
Police - Station 2
155.310 R 100.0 F1 Dispatch/Primary
154.175 R 100.0 F2 Records
155.955 R F3 Tac (Rare)
154.920 156.7 F4 CLEMARS
156.015 100.0 F5 Countywide (C/C tac)
155.475 100.0 F6 Talkaround
156.075 CSQ F7 CALCORD (C/C tac)

OTHER LOCAL GOVERNMENT AGENCIES

MEDICAL
154.010 100.0 Ventura County Fire Dispatch CH 1 (Dispatches all 3 civilian ambulance
155.175 103.5 MED 4 - Disaster Simulation (County Fire F63)
155.025 103.5 MED 5 - Dormant (County Fire F64)
155.205 103.5 MED 1- Ambulance response prior to 090105 (County Fire CH 17)
155.355* 103.5 MED 2 - Ambulance/Hospital (County Fire F28)

St. Johns Pleasant Valley Hospital-Camarillo
Ventura County Medical Center (VCMC)-Ventura
Ojai Memorial Hospital-Ojai
Simi Valley Adventist Hospital-Simi Valley
155.385* 103.5 MED 3 -Ambulance/Hospital (County Fire F29)
St. Johns Regional Medical Center-Oxnard
Community Memorial Hospital-Ventura
Los Robles Regional Medical Center-Thousand Oaks
Santa Paula Hospital-Santa Paula
*Extremely rare; cell phones taken over.

MISCELLANEOUS (All 123.0)
Conejo Recreation & Park District - 151.460 R
Gold Coast Transit (formerly SCAT) - 453.425 R

SCHOOL DISTRICTS
Briggs School District, Santa Paula - 155.175 (123.0) Operations
Ojai Unified School District - 155.280 (141.3) Buses
Oxnard School District - 151.925 (D165) Buses
Oxnard Union High School District
453.225 R 100.0 Buses
453.225 M 100.0 Operations/Security (Oxnard HS)
464.500 M Multi On-campus Administration
464.525* M Multi On-campus Administration

Pleasant Valley School District, Camarillo
151.835* Multi Operations
151.865* Multi Operations
151.955* Multi Operations
461.525* R D271 Buses

Santa Clara High School, Oxnard - 154.600* (Unk)
Santa Paula School District - 464.425 R* (Unk)
Santa Paula Union High School - 157.680 M* (136.5) (Campus)
Ventura Community College District
155.685 R 94.8 Security Dispatch (Dispatched by CSUCI/Station 16)
155.565 M Multi Security Direct (Individual campuses)
127.3 Oxnard College
167.9 Ventura College
192.8 Moorpark
154.540*B/M 110.9 Ventura Campus Operations

*Shared commercial frequency

OTHER ENTITIES
AIRPORTS
Camarillo
126.025 - ATIS
121.800 - Ground
128.200 - Tower
Oxnard
118.050 - ATIS
121.900 - Ground
134.950 - Tower
Santa Paula
122.900 - UNICOM (No tower)
NAS Point Mugu
125.500 - ATIS
120.750 - Clearance
121.600 - Ground
124.850 - Tower
135.175 - Tower (Secondary)

RAILROADS
Union Pacific (UP)
161.400 M - Maintenance
161.430 M - Switching
161.550 - Road
Metrolink (SCAX) - 161.545
Fillmore & Western RR(FWRY) - 160.500
Ventura County RR (VCRR) - 161.355

NOTES:
1. No letter after a frequency = simplex. B = base only. M = mobile only. R = repeater.
2. *Italic* means I have never monitored this frequency.
3. Agencies vary as to how they refer to their various radio frequencies, i.e. “frequency”, “channel”, or “band”.

SOUTHERN NEW JERSEY *Michael P. Mollet, N2SRO*

9-1-1 Communications Center

The Monmouth County Sheriff's Office-Communications Division operates 2 centers located in Freehold, NJ and Neptune, NJ. Our center employs 90 Full time staff members and answers 9-1-1 calls for 46 local jurisdictions and 1 military facility within Monmouth County. Our state of the art dispatch center featuring 36 dispatch consoles dispatches, 19 full time Police Departments which includes the Sheriff's Officers, 56 Fire Departments, and 28 First Aid Squads. The county also provides back up for 7 agencies.

In 2012, our agency answered 603,916 calls in which 192,814 were 9-1-1 calls for help. All of our staff is trained as Emergency Medical Dispatchers, Emergency Communication officers, and NCIC terminal operators. The 9-1-1 Call Center is discussed in further detail by Sheriff Golden in two **Monmouth In Focus** video segments. Click segment 1 or segment 2 to view the video.

The Communications Division utilizes Zetron Phone and Radio touch screen consoles at all 18 positions in the Freehold site. The Shore Area Communications Center located in Neptune utilized Telex Radio and Cassidian Phone at all 18 positions.
In September, 2012 the communications division updated it's Computer Aided Dispatch (CAD) system to Spillman. 18 agencies share Public Safety Software and Records Management Software with the Sheriff's Office. This includes 34 Public Safety Mobile, 8 field reporting and 77 agencies receiving Rip & Run Alerts.

Mobile Field Communications

Three Mobile Field Communication Command Posts units are operated and staffed by the members of the Communications Division. These units are equipped with state of the art equipment which includes Mobile Data Terminals (MDT's) with wireless access to our Spillman Computer Aided Dispatch System, and internet. Our units are also equipped with a Cisco Call manager, cellular phones, and multiple portable radios for all frequency spectrums. All field comm units are self-sufficient for up to 3 days with amenities such as a full kitchen galley, bathroom facilities and PTO and backup generators. The units titled Field Comm 1, 2, & 3 respond to large scale incidents such as fires, MCI's and public relations events.

Three Mobile Communications Units

The three units are available twenty-four hours a day, seven days a week for emergency and non-emergency events, which occur in Monmouth County.

Two units are equipped with a 32-foot telescoping camera able to view and record events and incidents from the field com unit.

Two units are equipped with a variety of radio equipment to facilitate radio communications at the scene.
These units are essential in emergency situations to act as the on scene command post and facilitate communications between various agencies involved in the incident

For non-emergency events such Municipal Days, Fairs, Parades and Festivals the field communications units provide an on-scene command post / remote police station for coordination of all functions of the event.
The third unit is a Ford 350 van, which will be a quick response unit and will carry a variety of radio equipment which has been supplied to Monmouth County for statewide interoperability. This unit also has 10ft trailer equipped with a 7.5kw generator and equipment for the establishment or augmentation of a remote Incident Command Post.

Portable Radio Network

This system includes over 225 portable radios available on a variety of channels, but all have a common channels. This system also includes portable base stations, which can be installed at a location for a special event to act in coordination with the Field Communications units, and portables.

Portable repeaters and interoperability channels with supporting radios.

Portable Inter-operability units (ICRI) / ACU 1000's. These units allow our field units to patch different frequencies and frequencies of different ranges together to facilitate interoperability at the incident.

FEDERAL

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The Veterans Administration (VA) operates facilities in most major metropolitan areas.

Here in Ohio their communications vary from the different regions. For this issue we look at their set ups throughout the state.

Cleveland VA Hospital:

173.6125/168.5250	107.2	Security 1
170.6000/166.2250	127.3	Security 2
173.7125/163.3750	131.8	Security 3
173.7125/163.3750	173.8	Security 4

Cincinnati VA Medical Center:

408.2375/417.2375	293NAC	Security P25

(Most communications are encrypted, some PD handhelds are in the clear)

This repeater can also be accessed by the VA facility in Fort Thomas, KY)

Dayton VA Medical Center:
Uses the following talk groups on Montgomery Co. TRS:

11664	Security
11696	Administration

We need the help of all our members to make this column great. Please send us any loggings, news, and updates pertaining to any federal communications **you may have. We look forward to hearing from you.**

Looking for Public Safety action photos for inclusion in the newsletter

Send your pics to:

ScannerDigest@gmail.com

SOUTHWEST OHIO

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Well, I don't know about you all, but I definitely have a bad case of Cabin Fever. While locally this winter hasn't been as bad as last year, it just seems to be lingering on and on. I'm ready for some greenery and to get out of the house with the scanner and my GPS to get some Geocaching in.

There is not a lot to write about, but we do have breaking news on the upcoming statewide switchover from the original Ohio MARCS system (P16) to the new Ohio MARCS-IP system (P25).

The original cutover date for ALL statewide agencies was to be March 15, 2015. That has been pushed back now at least for the Ohio State Highway Patrol (OSP). It seems that OSP's Vehicle Repeater Extenders that operate analog on 700 MHz (see a list of frequencies below) are causing interference in communicating on MARCS-IP 700 MHz sites.

Select MARCS sites will remain online for six months using one control channel and two voice channels for OSP use.

OHIO STATE HIGHWAY PATROL VREs:

774.03750		MARCS VRE 1
774.28750	306 DPL	MARCS VRE 2 Common (Statewide)
774.28750	CSQ	MARCS VRE 2 District 6 (Central Ohio)
774.33750		MARCS VRE 3

By the time you read this Clermont County should now be absorbed into MARCS-IP.

The City of Cincinnati has reached agreement to become a Tier 4 Partner with MARCS-IP.

Apparently Hamilton County is leaning toward a Tier 4 Partnership with MARCS-IP, but is currently dragging their heels on signing an agreement.

Miami County is building its own Harris APCO-25 system to replace its aging EDACS system. They will not be joining the MARCS-IP system.

Here is what we know of the system so far:

SYSTEM:	Miami County (P25)	
TYPE:	APCO-25 Phase I (Harris)	
FREQUENCIES:	851.7750	852.3000c
	853.3000	853.6500c

TALKGROUPS:

337	Radio Service Testing
1057	Radio Service Techs

If you are in the area, plug this system and start culling the new talkgroups as they become active.

That is all we have for this issue, if you have anything to report or whatever you are hearing, please drop us a line to the email address listed in the header. Please put "Scanner Digest" in the subject line.

========== END

MILITARY

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Annual Military Air Show Review and Preview

The Department of Defense (DoD) hosts open houses to enhance public awareness of the military's mission, equipment, facilities, personnel, and to promote positive community relations. Due to the federal budget sequestration, 2013 saw just a few military air shows. In 2014, military planes were back in the air nationwide, albeit on a limited basis. The U.S.A.F. and U.S.N. military jet teams along with the U.S.M.C. (AV-8 and M-22 single ship demos) flew full schedules while the U.S.A.F's F-22 and the F-16 West Heritage Flight flew a limited number of venues. For 2015, military air shows seem to be back to pre-federal budget sequestration normality.

Here's a review of a few shows from 2014.

For those in the mid-Atlantic region, Joint Base McGuire-Dix-Lakehurst (JBMDL) was our first air show for 2014.

ELEPHANT WALK

In order to make room for the show's static displays, McGuire's large ramp needed to be cleared of its thirty-two KC-10 and sixteen C-17 heavy aircraft. This mobilization exercise, during which the planes taxi down the runway one right after the other, is known as an 'Elephant Walk'.

The term 'Elephant Walk' is unique to the Air Force. Introduced during World War II, the Army Air Corps' large fleet of bombers would regularly conduct attacks by sorties comprising more than 1,000 aircraft. Observers commented that the nose-to-tail, single-file taxi movements of the heavily-laden bombers paralleled the nose-to-tail trail of lumbering elephants on their way to the next watering hole. The term stuck as a part of the Air Force's institutional language and was eventually used in Air Force regulations to define maximum aircraft surge

operations. On Tuesday May 6 we were invited to witness this year's Elephant Walk which involved one C-12 Huron, five C-17 Globemasters and ten KC-10 Extenders, being deployed to bases all over the world. This ramp clearing was both a training exercise, real-world mission and an essential event in preparation for the air show.

Joint Base McGuire-Dix-Lakehurst (JBMDL) 2014 Air Show Frequencies:

139.90 C-17 tactical
118.65 / 255.60 McGuire Tower
288.00 KC-10 tactical
121.80 / 275.80 McGuire Ground
130.65 McGuire Command Post
319.40 McGuire Command Post
134.10 AMC Common Command Post
349.40 AMC Common Command Post

Thunder over the Boardwalk- Atlantic City (Beach), NJ
For twelve years straight, this air show consistently remains the area's best mid-week remote venue. Unfortunately, continuing budget cutbacks precluded the normal showcasing of the local New Jersey military units from nearby Joint Base McGuire and Atlantic City International Airport. Air show promoter and Air Boss David Schultz was able to procure one of the limited U.S.M.C. AV-8 demos. The U.S.A.F. Thunderbirds have always highlighted this show, complimented by a traditional U.S.C.G. SAR demo.

Thunder over the Boardwalk- Atlantic City (Beach), NJ 2014 Air Show Frequencies:

363.300 VMFA213 (AV-8)	345.000 U.S.C.G. SAR Demo
141.075 Thunderbirds (V-1)/(am)	132.950 David Schultz Air Shows
235.250 Thunderbirds (U-1)	135.650 David Schultz Air Shows
322.950 Thunderbirds (U-2)	238.150 David Schultz Air Shows

NAS Oceana, Virginia (NASO)
NAS Oceana, VA is not just a weekend air show but rather a week-long event drawing aviation enthusiasts from the local area, many states through-out the union, Canada and far-off nations. Most return year after year, scheduling their vacation around the annual September show. Home to the Navy's East Coast Master Jet Base, daily operations offer a lot of flying activity including air show performers practice. On Thursday, the Blue Angels executed their Circle and Arrival (C & A's) maneuvers and practice show along with station F/A-18s practicing the Fleet-By and F/A-18 (Classic and Super-Hornet) Tactical Demos. Scaled down from past years, the traditional Fleet Flyby and Air Power Demonstration were flown by six 'gray' F/A-18s from VFA-32, three from VFA-106 and one VFC-12.

For 2014 Oceana was the only air show to see the F/A-18 tact demos, the purpose of which is to demonstrate the capabilities of the aircraft. Because the demo was being performed at the squadron's home station and included no travel expenses, authorization was granted by Strike Fighter Wing Atlantic. The F/A-18C Classic Hornet was flown by Joseph "Goat" Krukar, the F/A-18F Super Hornet by Nate "Fonda" Miller and Weapon Systems Officer (WSO) Lt. Jason "IAD…S" Hoch. While it is possible to fly the F/A-18F without a WSO, U.S. Navy directives will not permit it. Along with other responsibilities, the WSO assists the pilot during high speed low-level flight. Ten weeks prior to the show, the pilot's practice began with twenty trips to the flight simulator, flying three demo routines each trip- sixty in all. The pilots then moved on to practice at Navy Dare Range, VA, where they flew five hours total starting at high altitude, gradually descending to 'demo level'. After completing those proficiencies, they returned to Oceana, where they qualified in front of VFA-106 Commanding Officer Brent "Stretch" Blackmer and Strike Fighter Wing Atlantic Capt. Mark "Gerbs" Weisberger.

NAS Oceana, Virginia 2014 Air Show Frequencies

Blue Angels

353.400 VFA-32 tactical	360.20 NASO Tower
8- 237.80 (solos)	
353.450 VFA-32 tactical	336.40 NASO Ground
9- 275.35 (delta)	
360.425 VFA-32 base	
10- 305.90 (Fat Albert)	
273.700 VFA-106 tactical	
16- 284.25 (diamond)	
349.900 VFA-106 base	
17- 255.20 (C & A's)	
301.300 VFC-12 base	
18- 251.60 (start-up/maintenance)	

Here's a preview for 2015.

United States Air Force (U.S.A.F.)

The mission of the U.S.A.F. aerial events is to showcase American air power and positively affect Air Force recruiting and retention while enhancing community and international relations, educate current and future generations on the long-term importance of the U.S.A.F., and honor the sacrifice of those currently serving as well as war heroes of the past.

The U.S.A.F. Air Combat Command (ACC) has authorized the following assets to fly in 2015:
The U.S.A.F. Thunderbirds full schedule, Single-Ship Demos (F-22 and F-16 East), twenty shows each, the U.S.A.F. Wings of Blue and the Air Force Heritage Flight Foundation (A-1, P-51, P-38, P-40, P-47 and F-86) flown by thirteen qualified civilian pilots located throughout the country will be flown at up to forty show sites with no other USAF single-ship demos. Other ACC outreaches include flyovers of public events (Patriotic Holidays and National

Sporting Events) limited to; two-ship fighter or two-ship rotary aircraft or one bomber or one transport aircraft per event. No flyovers are authorized for civilian air shows. Static display aircraft will be limited to two Air Force aircraft at civilian air shows; unlimited at military open houses.
The F-22 RAPTOR will be flown by Capt John "Taboo" Cummings and, maintained by Superintendent MSgt. Michael Volosky and Team Chief TSgt. Jonathan "Wild" Billie. The F-16 VIPER East will be flown by Capt Craig "Rocket" Baker and maintained by Superintendent MSgt. Aaron "Smitty" Smith.

The schedules for Single Ship Demo (F-22 and F-16 East) teams and Heritage Flights can be found at the ACC web site: http://www.acc.af.mil/aerialevents OR the sites listed below.
F-16 VIPER East:
http://www.acc.af.mil/aerialevents/f16viper/index.asp
F-22 RAPTOR:
http://www.acc.af.mil/aerialevents/f22a/

Suggested Frequencies for the U.S.A.F. Demo Teams and Heritage Flights (H/F)

384.250 VIPER East	135.675 (H/F)	136.675 (H/F)
376.025 F-22	136.475 (H/F)	136.975 (H/F)

The U.S.A.F. Thunderbirds full schedule can be viewed at:
http://afthunderbirds.com/site/show-season/

Suggested Frequencies for the U.S.A.F. Thunderbirds Air Demonstration Squadron

139.800(am)	141.175(am)	143.850(am)
235.250(U-1)	140.400(am)	141.850(am)
150.150(am)	322.950(U-2)	141.075(am)
143.700(am)		

United States Navy (U.S.N.) Aerial Events Support

The U.S.N. F/A-18C Classic Hornet and F/A-18F Super Hornet will perform tactical demonstrations (TACDEMO) at twenty show sites. The TACDEMO will be evenly divided by the West Coast's NAS Lemoore, CA VFA-122 and the East Coast's NAS Oceana, VA VFA-106. The TACDEMO will not participate at air shows sites where the Blue Angels will be performing.
Naval Air Station, Lemoore CA (VFA-122)
Naval Air Station, Oceana VA (VFA-106)
http://www.vfa122.navy.mil/demo.html
http://www.public.navy.mil/usff/vfa106

The U.S.N. will also commit Navy aircraft, of any type, for static displays to twenty-seven air shows, ten of those to be civilian show sites, as well as forty flyovers. The Flyovers will be normally executed; at non-air show events, non-maneuvering at an altitude of 1000 feet above ground level and at 300 knots standard and, separate from the TACDEMO. Flyovers at military venues will consist of four planes maximum; civilian will be two planes maximum.

The U.S.N. Legacy Flight is similar to the U.S.A.F. Heritage Flight program. The Navy Legacy Flight consists of civilian pilots flying lead in WWII and other vintage navy tail-hook aircraft (T-33, F4F, F6F, F4U, FG1D, F8F, AD1, FJ4 and A4B) with an F/A-18 on their wing.

Other Navy aerial events may also include Parachute and/or SAR Demos. The Blue Angels and Thunderbirds are not permitted to perform together at the same location.

The U.S.N. Parachute Team, Leap Frogs, promotes the Navy SEAL and Special Warfare Combatant Crewman teams to the American public. The Leap Frogs will available to support twenty-seven air shows. You can find their schedule of events at: www.leapfrogs.sealswcc.com
Suggested U.S.N. Parachute Team Leap Frogs Frequencies:
407.500 (old)
461.0375 (2012)

The U.S.N. Blue Angels full schedule can be obtained at:
http://www.blueangels.navy.mil/show/

Suggested U.S.N. Blue Angels Flight Demonstration Squadron Frequencies:

2014	LMR (nfm)	Past Usage
8-	237.80 (solos) 142.6125 (A)	8- 345.90 (solos)
9-	275.35 (delta) 139.8125 (B)	8- 273.30 (solos)
10-	305.90 (Fat Albert)141.5625 (C)	9- 236.45 (delta)
16-	284.25 (diamond)	9- 264.35 (delta)
17-	255.20 (C & A's)	10- 263.35 (Fat Albert)
18-	251.60 (start-up/maintenance)	10- 265.00 (Fat Albert)
	264.55 (extra)	
16-	238.15 (diamond)	
	307.70 (west of Mississippi)	
17-	255.35 (C & A's)	
	302.15 (west of Mississippi)	
18-	346.50 (start-up)	

United States Marine Corps (U.S.M.C.) Aerial Events Support

Schedule of AV-8B Harrier and the MV-22 Osprey flight demonstrations:
http://www.marines.mil/CommunityRelations/AssetRequests/AerialSupport.aspx

United States Army Aerial Events

http://www.usarec.army.mil/hq/goldenknights/

Suggested U.S. Army Parachute Team Golden Knights Frequencies:

123.1500	123.4000
123.4500	123.4750
123.5000	

Royal Canadian Air Force

The Royal Canadian Forces Snowbirds and C/F-18 Demo have limited schedules in the United States (U.S.). The Snowbirds will perform fifty-seven total shows at thirty Canadian and seven U.S. sites. The C/F-18 Demo will mirror many of the shows the Snowbirds attend in Canada (twenty locations) in June, July and August and all seven locations in the U.S. in May and September. The C/F-18 2015 Demo Pilot is Capt. Denis "Cheech" Beaulieu from the 425 Squadron / 3 Wing Bagotville QC. The C/F-18 will be painted to commemorate the 75th anniversary of the Battle of Britain- "Never have so many, owed so much to so few."

The C/F-18 Demo scheduled can be seen at:
http://www.rcaf-arc.forces.gc.ca/en/cf-18-demo-team/schedule.page

The Royal Canadian Forces Snowbirds scheduled can be found at:
http://www.rcaf-arc.forces.gc.ca/en/snowbirds/schedule.page

Suggested Royal Canadian Forces 431 Air Demonstration Squadron Snowbirds Frequencies:

272.10 (formation)	299.50 (in route)
116.00 (start-up)	
242.60 (solos)	333.30 (in route)
246.50 (solos)	245.75 (formation/old)

BREITLING (Swiss) Jet Team

The BREITLING Jet Team is the largest professional civilian aerobatic display team in the world and the first of its kind. The team is comprised of seven L-39 C Albatros jets that can reach speeds of 435 mph. The BREITLING Jet Team has flown in thirty-six countries around the world and they will be coming to the United States in 2015. This will the first time the team has performed in North America.

For additional information on the team: The Breitling Jet Team scheduled can be gotten at:
http://www.breitling-jet-team.com/en
http://www.breitling-jet-team.com/en/news-events

Suggested BREITLING Jet Team Frequencies:
*(reported by others)
118.325 / 127.350 / 129.025 / 130.200

There is a wealth of air show information on the internet. Here are just a few sites:
http://www.airshows.aero/CMS/ICASConvention#
http://www.airshowstuff.com
http://allthingsaero.com/hangar/deb_mitchell
http://www.aero-pix.com
http://www.milavia.net/airshows
http://www.airshows.com

Hope to see you on the flight-line in 2015. Dan

Breitling Jet Team with Swiss Air Force F/A-18
(Photo by, Breitling Jet Team)

U.S.C.G. SAR Demo Atlantic City, NJ 2014
Photo by Dan Myers

AV-8 Harrier Demo Atlantic City, NJ 2014
Photo by Dan Myers

"Elephant Walk" McGuire AFB, NJ May 2014
Photo by Dan Myers

Fleet Fly-By at NASO 2014 *Photo by Bob Finch*

Blue Angels Diamond at NASO 2014 *Photo by Bob Finch*

Thunderbird Solos 2014 *Photo by Bob Finch*

Blue Angels Solos 2014 *Photo by Bob Finch*

AMATEUR RADIO

Robert Gulley AK3Q
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Scanner Digest: Amateur Radio Propagation Banners Part 1 Robert Gulley AK3Q

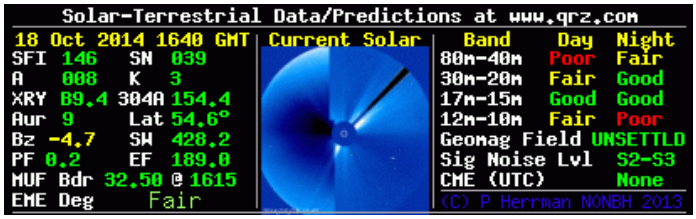
This past year has seen a lot of solar activity, particularly with regard to unusual geomagnetic activity and some surprising sunspot groups. There have been a few occasions where HF conditions were disrupted enough that blackout conditions occurred for several hours at a time, and heightened activity meant VHF conditions were enhanced.

All this activity caused me to study the propagation banners more closely, since before this, I only looked at one or two numbers and maybe glanced at the band opening section. As both a scanner enthusiast and an amateur radio operator, I wanted to know more about the information given in these banners to enhance any and all opportunities. Unusual conditions can mean activity increases in the upper HF amateur bands as well as in the VHF/UHF bands, and this can provide interesting opportunities for scanning as well.

What follows in this edition and the next is a breakdown of a typical propagation banner which I hope will both inform, and make more practical, the wealth of information they contain.

Sources
The propagation banners we see everywhere are the product of Paul Herrman, N0NBH. From Paul's page, he describes the banners and sources as follows:

Solar banners are available in 19 different configurations, with variations of solar indices and measurements, HF Conditions, VHF Conditions, EME degradation, selectable and fixed MUF, selectable K index (impacts conditions), signal noise and geomagnetic conditions, current selectable solar images, world sunlight maps and globes, moon view globe, graphs and plots, and selectable current solar system planet locations.
--Data for VHF Conditions is from DXrobot - Gouda, Make More Miles on VHF, and Andy (G7IZU) (all used with permission).
--Data for Solar Flare Probability is from University of Bradford (used with permission).
--Data for solar data and conditions from NOAA SWPC, solar flux from Space WX Canada, solar images from NASA, and world map/globes/solar system from Fourmilab



Sample Banner from www.qrz.com web page

SFI
The Solar Flux index is one of the most common numbers read on these banners, along with the Sunspot Number.
-- The SFI is considered a reasonably good indicator of the F-Layer ionization level, although it does not really affect propagation directly.
-- The 2.8 GHz measurement (sometimes called the 10.7 cm flux) is measured daily with typical ranges between 60-300. Higher numbers usually indicate higher MUFs, and therefore higher bands for DXing.
-- This number should be seen more in terms of a pattern rather than an individual number.
-- A high Solar Flux Index on any given day does not mean conditions will be great—rather several days of a high SFI can mean favorable conditions have developed which will offer good DXing on some of the higher bands.

Sunspot Number
Sunspot numbers indicate overall sunspot activity and the size/quality of the sunspot groups.
-- The ranges go from 0-250, with higher numbers indicating more upper-level ionization.
-- Folks start talking on the ham bands when the sunspot numbers are up because they are a very useful indicator of when upper bands might allow some serious DXing.

For example, an SFI of 126 is respectable, which might indicate possible upper-level ionization, but we may notice a sunspot number that is rather low, say 49;
-- the SFI may indicate good solar activity, but with a low sunspot number we will see band predictions which are moderate

Sunspot numbers are averaged monthly over 12 months.
-- The 12-month average gives the best correlation for propagation activity, but does not account for unusual sunspot activity

A and K Indices
The A and K indices are the other two most commonly read indicators of ionosphere conditions, and folks will often refer to the K index as an explanation for good or bad propagation conditions.
-- The A Index is an averaged number, meaning it is based on the previous day's readings. The A index is a scaled value in the range of 0—400.
-- The K index is based on the latest average of eight readings taken every three hours from around the world.
-- The K index is a logarithmic value, 0–9, with levels of 4 or more indicating a geomagnetic storm.

-- High geomagnetic activity can lead to HF radio blackouts

K Index Ranges
K0=Inactive
K1=Very quiet
K2=Quiet
K3=Unsettled
K4=Active
K5=Minor storm
K6=Major storm
K7=Severe storm
K8=Very severe storm
K9=Extremely severe storm

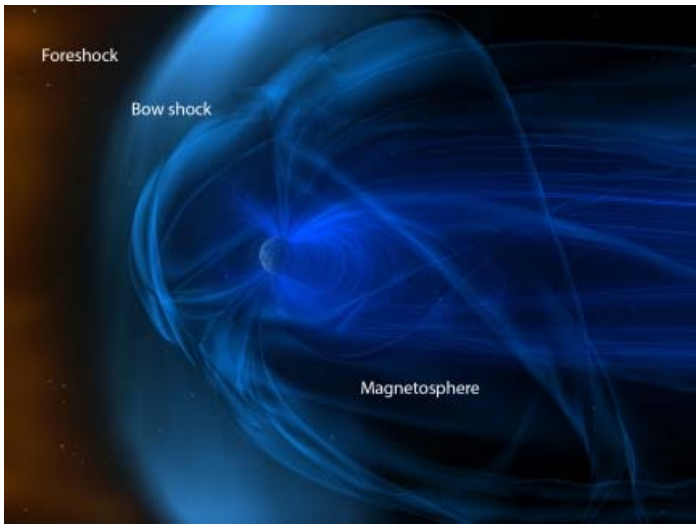
A Index Ranges
A0 - A7 = quiet
A8 - A15 = unsettled
A16 - A29 = active
A30 - A49 = minor storm
A50 - A99 = major storm
A100 - A400 = severe storm

XRY
The XRY reading is a measure of the X-ray intensity of X-rays hitting the atmosphere
-- "B" and "C" indicate the lowest levels of activity, while readings of "M" and "X" indicated possible blackout conditions for Regions 1-2, and Regions 3-5 respectively.
-- more useful is the indication this number/classification gives for the D-layer activity, which is the layer responsible for blocking signals from the broadcast band up to 4-5 MHz during daylight hours.
-- If the X-ray level is high enough, the absorption effect of the D-layer is greatly increased, potentially reaching up through the entire HF band, meaning signals from earth never make it through to be reflected off the F-layer.

X-ray intensity varies greatly with solar activities such as solar flares and CMEs.
-- X-ray intensity increases based solely on the strength of the solar flare. E-layer activity is directly affected by X-ray flux, whereas F-layer activity is more affected by the UV flux.

304A
This category refers to the solar radiation level measured in the ultraviolet light range of 304 angstroms, produced by ionized helium in the sun's photosphere.
-- Radiation in the ultraviolet spectrum creates much of the F-layer ionization, reflecting/refracting RF signals back to earth.
-- Two different measuring stations are used—one here on earth and the other comes from the SOHO satellite. The range is 0—infinity
-- This number increases with increases in the solar flux index (SFI).

Bz
Interplanetary magnetic field, Bz, which indicates a positive or negative pull with or against the earth's geomagnetic field.
-- The solar winds are responsible for carrying the interplanetary magnetic field through space.



-- A positive value indicates the interplanetary field is working with, or oriented in the same direction, as the earth's field.
-- negative numbers mean it is pulling or distorting the earth's magnetic field and therefore increasing the effect of geomagnetic disturbances.
-- In effect the shielding of the earth's magnetic field is reduced when the readings are negative.
-- The geomagnetic field is a teardrop shape pattern giving us the north and south magnetic poles
-- it helps direct ionization flow around the atmosphere.
(The image above shows a representation of the field, including the tail which faces away from the sun, and the bow shock created by the resistance of the earth's magnetic forces encountering the sun's radiation forces.)
-- The magnetic field traps charged particles which might cause a great deal of damage if they were to reach earth's surface, as well as greatly influencing the shape and direction of radio signals.
-- The geomagnetic field is weakest near the polar regions and strongest near equatorial regions and on the night side of the earth opposite the sun
-- The variations in the geomagnetic field are much of what these forecasts are designed to predict because they are the most likely to affect day-to-day HF propagation.

Solar Wind
The SW reading is a measure of the solar wind speed, ranging from 0—2000 km/s, with readings typically well under 500.
-- If the speed increases to more than 500 there is increased pressure on the ionosphere, weakening it, and causing disturbances to the F-layer.
-- The solar wind contains charged particles and magnetic fields.

-- Stronger winds will create a more distorted shape to the earth's magnetic field—in effect flattening it—which further reduces the magnetic strength at the poles as well as causing the tail to extend even further behind the earth.
-- The movement of the solar wind (or plasma) is outward from the sun, and fills an area known as the *Heliosphere*. It varies in density, temperature and speed.
-- There is some speculation that rather than the geomagnetic field around earth acting as a block for the solar particles, it may act more as a filter.
-- More research along these lines will certainly benefit us in terms of understanding propagation all the more, as these solar winds greatly affect RF signals.

Wrap-up
Understanding more about propagation and solar activity in general will make both amateur radio and the scanning hobbies more interesting and more rewarding as we take advantage of the opportunities presented to us. Just as special weather conditions here on earth can open up skip zones, so too special solar activities can close some portions of the spectrum while opening up others. I guess I never completely get away from the thrill of hearing unexpected things on the radio, whether it is AM, Shortwave, or VHF/UHF bands!

73, Robert AK3Q

ILLINOIS

Mike Dickerson
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I have been very lazy when it comes to writing up an article. My life like everyone else's' has been hectic leading up to the holidays. I have let my hobby side of things be put away for life. And you know I became disappointed. This last week a few things have peaked my interest in scanning and amateur radio. I was reviewing the latest FCC license approvals and found that NXDN the Kenwood and Icom utilized digital protocol is becoming closer and closer to railroads. Many regional, shortline, and class 1 railroads are now adding the NXDN emissions designator (4K00F1E) to their licenses. This is obviously in line with the information obtained that the railroads will at some point forward begin using NXDN instead of analog as was adopted by the American railroads. I will attempt to follow and advise as any systems do go live with NXDN.

There are several new frequencies and systems being deployed. There are new P25 systems, migrations to Starcom 21. Effingham City and Effingham County, and Vandalia Police law enforcement have migrated to Starcom 21.

Crawford County, Illinois is reported to have moved to a P25 digital system which is full time encrypted. There are some times it is used analog.

Richland County is reported to be using a P25 system, they still at times do use analog. The frequency remains the same as it has been 158.790 MHz. Olney Police department has also moved to P25, on the frequency of 154.355 MHz.

Shelby County Sheriff's Department is reported to be using a P25 encrypted system, while the Shelby Area Ambulance Service is using a DMR system, which is reported can be voice decoded according to online postings.

The Marion County Sheriff's department has also made the move to DMR with a repeater on 151.3925. Marion County fire dispatch has also relocated from the national fire frequency of 154.430 to 151.220 MHz, except for the city of Centralia Fire, which dispatches on 155.070 MHz. Marion County EMS is dispatched on 151.190, while Lifestar EMS is dispatched on 155.160. Also in Marion County, the Salem Community High School has added a new repeater 152.3225. It is not specified what this frequency is used for.

Spring is coming up in a few weeks and that means more outings and HAM FESTS! So I have compiled a list of ARRL Hamfests which are listed below.

3/18/15 - Sterling Rock Falls Hamfest, Sterling,IL
http://w9mep.org

4/04/15 - April Fools Hamfest 2015- Noble,IL -
http://www.whereradio.webs.com

05/03/15 - THE DEKALB HAMFEST - Sandwich,IL -
http://www.karc-club.org

NEW HAMPSHIRE

John Bolduc
JohnBolduc@YMail.com

Fire Ground and Tactical Frequencies
A de facto fire ground frequency for much of New Hampshire has been 154.280 for a few decades. Initially used in the carrier squelch mode (no CTCSS / PL) used to transmit or receive. Many departments did adopt transmitting a PL tone of 136.5 while still listen CSQ.

Since about 2010, several departments have been using the National Standard VFire-21 frequency of 154.280 with a PL of 156.7, while retaining Statewide Fire ground of 154.280 with no PL to be compatible with Mutual Aid Departments.

_ _ _ _
The following departments have been heard using VFire-21 as their primary fire ground channel.
154.280 / PL 156.7
Brentwood

Derry
Hampton
Newmarket
Londonderry
Pelham
Windham

_ _ _ _
The following departments have been heard using VFire-22 as their secondary fire ground channel.
154.265 / PL 156.7
Derry
Londonderry

_ _ _ _
The following have been heard using VFire-22 as their third fire ground channel.
154.295 / PL 156.7
Derry

_ _ _ _
The following department have been heard using Statewide Fire Ground 154.280 PL 136.5

Goffstown
Litchfield
New Durham

_ _ _ _
Lakes Region has the following tactical / fire ground channels.
(It appears that these channel are assigned geographically, although I may be premature on that assumption)

160.1100 PL 210.7 / DPL 331 Channel 2
160.1550 PL 210.7 / DPL 331 Channel 3 – Belmont, Gilford, Laconia, Meredith, Waterville Valley
154.2800 PL 136.5 . . . . . Channel 4
154.3025 PL 210.7 / DPL 331 Channel 5 – Ashland,
154.9875 PL 210.7 / DPL 331 Channel 6 – Sanbornton

The PL tones have changed in the past year for Lakes Region and I'm on the fringe for receiving fire ground traffic. The best I can gather is all the fire ground channels use PL 210.7 except 154.280 I have as still using PL 136.5

_ _ _ _
Southwestern NH Mutual Fire Aid has the following tactical / fire ground channels.
154.385 PL 136.5 Tac-1
154.280 PL 136.5 Tac-2
153.830 PL ?-? . . Tac-3
154.010 PL ?-? . . Tac-4 Used mostly for Vermont calls
154.295 PL ?-? . . Tac-5 Used mostly for Vermont calls

_ _ _ _
Hanover / Upper Valley Dispatch tactical / fire ground channels
153.845 PL 141.3 Tac-3 Grafton NH, Thetford VT
154.265 PL 141.3 Tac-4 Plainfield NH
154.310 PL 141.3 Tac-5 Enfield NH
154.950 PL 141.3 Tac-6 Canaan NH
154.370 PL 141.3 Tac-7 Grantham NH
153.950 PL 141.3 Tac- 8 Repeater
156.165 PL 141.3 Tac-9 Norwich VT

_ _ _ _
New London Dispatch tactical / fire ground channels
154.160 PL 136.5 Channel 2
155.6025 PL 136.5 Channel 3 Wilmot
154.280 PL 136.5 Channel 4
153.830 PL ? - ? . Channel 5
155.835 PL ? - ? . Channel 6 Newbury (doubtful if still used)
154.025 PL 136.5 Channel 7

_ _ _ _
Capital Area Dispatch tactical / fire ground channels
154.235 PL 136.5 Channel 2
154.220 PL 136.5 Channel 3
154.280 PL 136.5 Channel 4
158.760 PL 136.5 Channel 7 Hooksett
156.2325 PL 146.2 Chan. 10 Concord Hospital

_ _ _ _
Ossipee Valley Mutual Aid (Carroll County Sheriff)
154.340 PL 136.5 Channel 2
154.265 PL 136.5 Channel 3
154.280 PL 136.5 Channel 4
154.3925 PL 136.5 Chan. 5

_ _ _ _
VFire-25 154.2875 PL 156.7 – Logged during 2014, town unknown

_ _ _ _
Derry still has their 153.995 PL 114.8 tactical channel which they would use during storms or large gatherings or festivals.

_ _ _ _
Nashua is on 800 MHz but utilizes 154.325 PL 103.5 as a VHF fire ground tie for mutual aid

_ _ _ _
VMed-29 155.3475 PL 156.7 – Used by DHART Medical Helicopter to contact ground if not using the fire department's fire frequency.

Two Tone Fire Tone Outs (Recent Loggings)

Town	Use	Freq	Tone A - Tone B
Alexandria	Fire	159.900	1433.4 – 953.7
Alexandria	Amb	159.900	1433.4 – 707.3
Amherst	Fire	151.220	1217.8 – 1185.2
Chichester	Fire	154.355	1046.8 – 1179.6
Chichester	Amb	154.355	642.1 – 1179.6
Danbury	Fire	159.900	1687.2 – 726.8
Danbury	EMS	159.900	1687.2 – 1285.8
DHART2 Medhelo		464.450	697.9 – 552.8
E. Kingston Fire		154.190	600.9 – 1153.4
Exeter NH (Striking the Box – 4 sets of two tones)			
		154.400	600.9 – 832.5 —— 600.9 – 979.9
		154.400	600.9 – 1217.8 — 600.9 – 1357.6
Francestown Fire		154.430	1092.4 – 707.3
Franconia	Fire	154.400	2468.2 – 953.7
Franconia Life Sqd		154.400	2468.2 – 1153.4
Fremont Fire/Resq		154.190	767.4 – 669.9
Gilmanton Fire		159.900	832.5 – 953.7

Goshen Fire 154.430 832.5 – 979.9
Groton-Hebron FD 159.990 1464.6 – 1820.3
Hampstead F/EMS 151.1875 1900.1 – 871.1
Hampton Falls FD 154.145 2334.6 – 1356.7
Hancock Fire 154.430 410.8 – 349.0
Henniker Fire 154.355 788.5 – 1598.0
Henniker Amb 154.355 788.5 – 1472.9
Hillsboro Fire 154.355 871.1 – 798.8
Hillsboro Amb 154.355 798.8 – 953.7
Hinsdale Fire 154.430 1153.4 – 1433.4
Hooksett Fire 154.355 1217.8 – 1434.4
Langdon Fire 154.430 1164.4 – 707.0
Lempster Fire 154.430 832.5 – 953.7
Lisbon Life Squad 154.400 669.9 – 1122.5
Madbury Fire 156.105 1598.0 – 2043.8
Madison Fire 154.175 707.3 – 1687.2
Marlborough fire 154.430 421.1 – 855.5
Marlow Fire 154.430 421.1 – 1285.8
Mont Vernon Fire 33.640 634.5 – 746.8
New Castle Fire 154.190 1472.9 – 1598.0
New Castle Amb 154.190 1598.0 – 1472.9
Orford Fire Dept 155.8725 1034.7 – 1122.5
Pembroke Fire 154.355 642.4 – 843.0
Pittsfield Fire 154.355 910.2 – 834.0
Plaistow Fire 155.3175 1881.0 – 1217.8
Portsmouth FD 153.770 669.9 – 2806.4
Richmond Fire 154.430 422.1 – 1357.6
Rye Fire Dept 154.190 953.7 – 1185.2
Sanbornton Fire 159.900 1220.4 – 671.9
Stratham Fir/Am 154.190 832.5 – 903.2
Strafford Fire 159.900 1393.6 – 1820.3
Sutton Fire Dept 154.995 832.5 – 1217.8
Tri-Town Amb 154.355 871.4 – 1402.1
Unity Fire Dept 154.430 832.5 – 1357.6
Washington Fire 154.310 788.5 – 1830.5
Wilmot Fire Dept 154.995 368.5 – 389.0
Wolfeboro F&Rsq 154.250 1122.5 – 584.8

– – – –

School Frequencies (Routine Traffic)

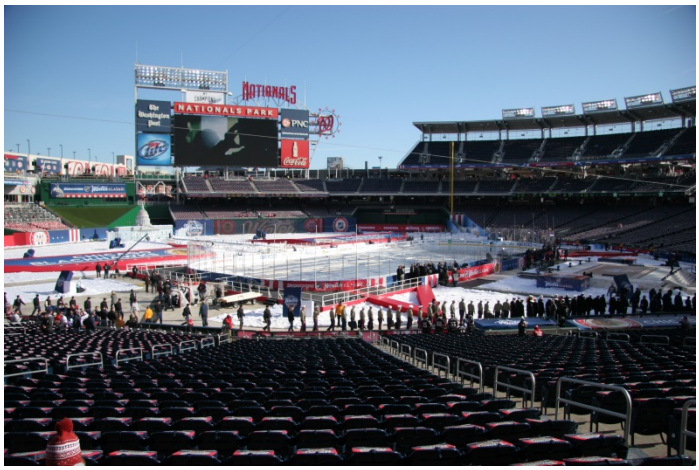
Londonderry Schools
Mathew Thornton 452.1125 DPL 445
Moose Hill School 452.6375 DPL 445
North Elementary 452.1875 DPL 445
South Elementary 451.2375 DPL 445

Following no longer heard although previously logged:
Londonderry H.S 159.900 DPL 445
L'D. Middle School 451.7375 DPL 346

– – – –
Pinkerton Academy, Derry NH
Maintenance 154.625 PL 127.3

WASHINGTON DC REGIONAL *David Schoenberger*
davidschoenberger@gmail.com

DC continues to migrate users to the Project 25 system. The legacy Project 16 system has become a shell of its former self. (At last check, there were only five frequencies left.) DC Fire began using the P25 system a few months ago, and encrypted most of their talkgroups. But the new mayor of DC (sworn in in January) has promised that most of the encryption will be removed beginning in March. Even though officials deny it, the move to clear talkgroups may have at least been partly the result of alleged communications problems during a Metro train incident outside the L'Enfant Plaza station in January. Regardless of the motivation, this is certainly good news for scanner hobbyists, and probably one of only a few cases in the United States where public safety encryption has been removed after being implemented.



The **2015 National Hockey League Winter Classic** was January 1 at Nationals Park. Because the Metropolitan Police and DC Fire were encrypted, I was not able to obtain the talkgroups their agencies were using. But there were a great number of UHF frequencies in use by the NHL, organizers, media, and security. Nationals Park personnel use several UHF conventional DMR frequencies, which are able to be monitored with a USB software-defined radio dongle and a program like DSD+.

The annual Washington Auto Show came to the Walter E. Washington Convention Center at the end of January. In a couple hours of monitoring, I found surprisingly little. A few UHF simplex frequencies were active for organizers and show participants. Given the prolific radio usage by other recent events (USA Science & Engineering Festival, Microsoft Worldwide Partner Conference) at the convention center, I was surprised at the paucity of radio usage at this event. The convention center itself uses a five-channel MOTOTRBO Capacity Plus trunked system, which may be monitored with a USB SDR dongle and DSD+.

THINK BEFORE YOU ACT IRRATIONALLY

Be sure to check the "NEWS" page of the website for the latest distribution of the newsletter.

"I can't wait for the next issue of the Scanner Digest Newsletter"

MASSACHUSETTS *Peter Szerlag*
zerg90@gmail.com

Greetings from Buuurrrrston

Boston is setting all sorts of records this year. Most snow ever. Coldest ever. Most mermaids ever. (Just kidding about the mermaids - but we can always dream)

Mutual aid snow plows and loaders have arrived in Massachusetts from New Jersey, New York, Vermont, etc. They possibly have been using some of their home radio channels, and maybe some Itac channels.

The MBTA had terrible problems with transit services. Since they use a Pro Voice 800 Mhz TRS, and since there are no live scanner audio feeds of their system, very few people are able to listen to their radio communications.

On the "openness" front; Mansfield PD turned off encryption - Leicester PD turned on encryption - and a scannerist in Tewksbury led police to a person who had just stabbed two people at a school. The perpetrator in Tewksbury was shot and killed by police when he refused to put down his knife.

Massachusetts has licensed base stations across the state on some of the V tac channels. The control point for the base stations is listed as the MEMA HQ in Framingham.

"Revere Scanner" at Facebook is using a scanner to post breaking incidents in the City of Revere. The effort is being supported by onscene photographs being uploaded from cellphones.

Here are a few new recent FCC listings -

Mass Maritime Academy - 451.65 R
East Bridgewater PD - 453.7875 R
Mass DOT HQ in Boston - 461.6625 R
Boston Properties at 4 Cambridge Center in Cambridge - 463.6625 R

Greater Boston Police Council - 482.8875 R - 483.0375 R - repeaters at Holbook, Bourne, and Marshfield

Western Mass Law Enforcement Council - 460.225 R and 460.475 R at Lenox and Great Barrington

Hopefully these freqs will keep you warm until Spring - Peter Sz

EASTERN PENNSYLVANIA *Steve Bower*
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Sorry, no column this issue

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http://www.pghscannner.com

Sorry, no column this issue

Product Announcement

DXtreme Station Log — Multimedia Edition, Version 11.0

DXtreme Software™ has released a new version of its popular logging program for Amateur Radio operators: **DXtreme Station Log — Multimedia Edition™ Version 11.0.**

New Features in Version 11.0

■ **Afreet Ham CAP Integration** — DXtreme's **DX Spot Checker** integrates with Afreet Ham CAP, an optional HF propagation prediction program available from Afreet Software, Inc. Users activate Ham CAP by requesting short- or long-path propagation predictions on spotted stations.

■ **Direct Tune** — Users can now change their rig's frequency and mode from the Station Log window (in addition to within the DX Spot Checker) if they are using Afreet Omni-Rig for rig control.

■ **Social Media Posting** — When users add or display a log entry, Station Log prepares an announcement of the contact and displays it on the **Social Media Post** tab. From there, users can drag (or copy) the post to their favorite social media web site(s) to share their news with others.

Using the **Script Editor** window, users can create and edit social media scripts that *format* their social media posts. Four social media scripts come with the software.

■ **Last Log Entries Window** — In addition to the **Last Log Entries** *grid* on the Station Log window, users can now display a *re-sizeable* **Last Log Entries *Window*** when more room is needed to display contact information. A Properties dialog box lets users change the order of columns, set foreground and background colors of grid headings and data rows, plus more. Double-clicking records displays their detailed data on the Station Log window.

■ **WAS Analytics™** — A window-based tool, **WAS Analytics** lets users analyze their Worked All States (WAS) data and quickly access the specific log entries upon which they need to take some kind of action, such as submitting or re-submitting a QSL or e-mailing the ham they contacted.

Standard Features

DXtreme Station Log lets hams log their contacts and import ADIF files from other programs. It supports major call sign subscription services, and offers the following multimedia and advanced functions:

■ **DX Spot Checker™** — Receives DX spots from Telnet-based servers, and determines whether QSOs are needed for new or verified DXCC® entities, band-entities, mode-entities, or VUCC grids.

■ **DX Atlas Integration** — Performs DX Atlas azimuth plots from the user's location to that of a spotted or logged station. Also creates maps for a variety of reports. (A software license for Afreet DX Atlas is required to use it.)

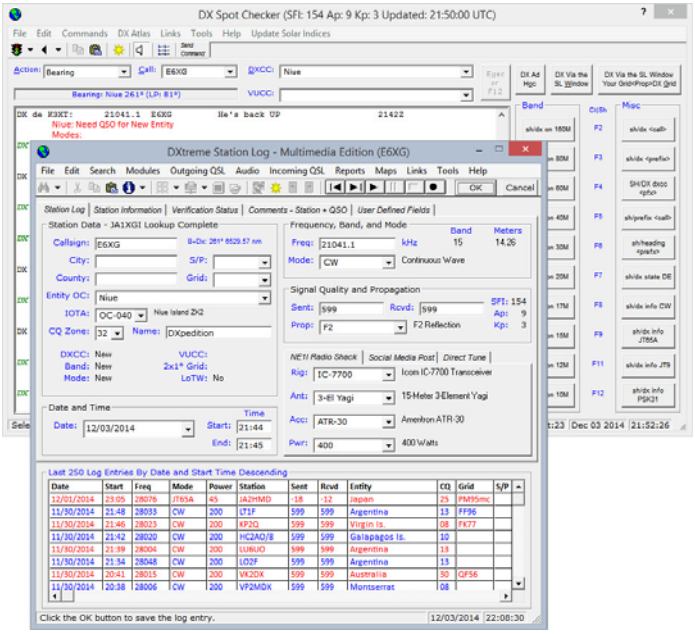
■ **Band Master Integration** — Afreet Band Master can be invoked with Needed Lists based on the user's Station Log database. (A software license for Afreet Band Master is required to use it.)

■ **Rig Control** — Tunes/retrieves frequencies and modes from supported rigs through integration with Afreet Omni-Rig, available from Afreet Software.

■ **QSL Processing** — Creates QSL and address labels for physical QSLs, and supports the ARRL's **TQSL** program for uploading .TQ8 files to the LoTW server automatically. Also retrieves LoTW QSL records, and includes a QSL Imaging™ facility for scanning, capturing, and displaying physical and electronic QSLs, including LoTW QSLs.

■ **Audio Facility** — Records and plays QSOs.

■ **Reports** — Provides a wide range of performance and station reports to let users see how well they're doing. All reports can be filtered and sorted. Includes a window-based DXCC® Analytics™ tool for analyzing and enhancing DXCC standing.



Operating System and Requirements

DXtreme Station Log runs in 32- and 64-bit versions of Microsoft® Windows® 8.1, Windows 8, Windows 7, Windows Vista®, and Windows XP.

Trademarks

DXCC® is a registered trademark of the American Radio Relay League, Inc.
Microsoft®, Windows®, and Vista® are registered trademarks of Microsoft Corporation.
Band Master, DX Atlas, Ham CAP, and Omni-Rig are owned by Afreet Software, Inc. A purchased software license for Band Master and DX Atlas are required to use them.

Pricing and Support

DXtreme Station Log retails for $89.95 USD worldwide for Internet distribution. Special pricing is available for upgrading users, and CD shipment is available for a nominal surcharge.
All prices include product support by Internet e-mail.

About DXtreme Software

Based in Nashua, NH, DXtreme Software produces powerful and easy-to-use logging applications for all kinds of radio enthusiasts — from short-wave and medium-wave listeners and DXers to Amateur Radio operators.

For more information about DXtreme Station Log — Multimedia Edition V11.0, visit www.dxtreme.com or contact Bob Raymond, NE1I, at bobraymond@dxtreme.com

VERMONT

Jim Lawrence
c/o Scanner Digest
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Chittenden County PDs And P-25 Encryption

Now that P-25 radios have been rolled out to law enforcement in Chittenden County and other locations around the state, monitoring police activity has become much more difficult in some areas. Here's a quick summary of how some local law enforcement in Chittenden County are using P-25. For each department, I've indicated the P-25 NAC it uses starting with a "$".

Burlington PD, 460.1250, ($658), uses P-25 encryption all the time on this frequency which serves as its main dispatch channel. However, Burlington PD occasionally uses 460.2875 (D125) which remains analog.
Colchester PD, 453.7500 ($264) uses encryption almost all the time.
Essex PD, 460.1000 ($878), mobiles encrypted or encoded; base may be P-25 encrypted, encoded or, rarely, analog (D411).
Milton PD, 460.4000, ($893), uses encryption all the time.
Shelburne PD, 453.1500, (118.8), is always analog.
South Burlington PD, 460.1750 ($846) occasionally uses P-25 encryption but is usually analog, (D654).
University of Vermont PD, 453.0500 ($656), uses P-25 encryption all the time.
Williston PD 453.8500 ($764) rarely uses P-25 encryption and is usually analog (118.8).
Winooski PD, 460.2000 (D065), is always analog.

All traffic I've monitored on 460.5000, which is used as a car-to-car frequency, remains analog based on my monitoring.

So what can you do if you want to keep abreast of happenings in your community and your PD is making extensive use of P-25 encryption? One way might be to monitor local fire and EMS services. In all locations in Chittenden County, fire and EMS dispatch services remain analog.

For those of you determined to try to monitor local law enforcement that is using encryption on a part-time basis, here are a couple of ideas. If your PD is using analog part of the time, use a scanner that can be programmed to monitor only certain CTCSS or DCS tones on a given frequency and program those tones into your scanner. Then, you'll only hear the analog traffic. If you're determined to hear P-25 encoded traffic as well, some of the newer high-end scanners don't unmute when they detect encrypted voice and will allow both analog and P-25 encoded voice to be heard.

At the county level, I have received reports that the Chittenden County sheriff is using P-25 but I have never monitored them doing so. Their 460.4500 (D114) remains analog for most routine operations.

The Vermont State Police's Williston barracks 460.2250 (203.5) are always analog.

And that's it for this time around. As always, your contributions help make this column interesting! What do you listen to these days? Send me a list of frequencies you enjoy and I'll publish them here. Until next issue, happy listening!

Have material to submit?
Please send it to:

ScannerDigest@gmail.com

CANADA *John Leonardelli - VE3IPS*
ve3ips@gmail.com

Hello Canadian Scanner Enthusiasts

I hope everyone has been enjoying the frigid weather and the resulting increase in local public safety scanner activity. This month we look at how fire fighter enthusiasts spend their free time in being on the scene of a multiple alarm fire and providing much needed support services. Some of these groups are also members of the International Fire Buff Association (www.ofba.ca) or local fire enthusiast clubs. There is always an interesting mix of club members including active or retired fire personnel and those with a keen interest in the public safety community.

Support 7 Canteen – Toronto Fire Services

The Greater Toronto Multiple Alarm Association has operated a volunteer canteen and rehabilitation service for the Toronto Fire Services for almost 40 years. Many GTMAA members volunteer hundreds of hours each year staffing the Support 7 Canteen vehicle. They provide services East of Yonge Street. They also publish a newsletter called the "Trumpet" and members enjoy a social aspect as well as different events visiting fire services with a behind the scenes look.

1977

1998

Current

Further information is at http://www.gtmaa.com
Many of the volunteers use a cloud service that provides incident information for TFS via a map application - http://www.torontofirecalls.com. There could be one in your city.

Another group that covers West of Yonge Street is The Box 12 Association. This group has been in existence since 1949. Their canteen truck is based on a typical food truck.

A typical dispatch call is where TFS makes a call to a cascade list at Support 7/Box 12 who then broadcasts a message out to the volunteer teams who then make their way to the fire scene.

TFS is moving onto the new Project 25 Phase 2 system managed by Toronto Public Safety. There continues to be talk that the FDP will free and clear for dispatch purposes while police will be encrypted. Many volunteers will not be able to monitor Fire services if it is encrypted unless they have a TFS issue radio. I doubt that TFS will be providing radios to non-personnel.

This also presents itself a dilemma across the country as encrypted comms pose a problem for volunteers to listen to dispatch traffic as fire or police auxiliary members.

These are current conventional frequencies that may continue to have activity during larger fires even if they go P25 encrypted. Check Radio Reference for those frequencies.

http://m.thestar.com/#/article/news/gta/2010/03/10/police_move_toward_35_million_encrypted_radios.html

I was not aware of these various Fire Buff organisations so I suggest you search out for these groups in your city. Who knows you may wish to be involved and add some fun and excitement to your hobby.

ACARS

With several missing airplanes the past year, the term ACARS keeps coming up. If they have ACARS how can they still be lost?

ACARS or **Aircraft Communications Addressing and Reporting System** is maintained by Aeronautical Radio, Inc. ARINC and has a huge VHF and HF voice network throughout North America and overseas to provide operational radio communications for the aircraft industry. The ACARS system is an addressable, digital data link for commercial and business airplanes allowing a way to communicate with ground stations. Our focus is on the VHF portion and it uses AM modulation. Each signal burst is quite short and I have found that you need to keep the squelch open on your radio. In some cases you may wish to take an older 10-20 channel radio and dedicate it to ACARS use. You will also need a decoder to make sense of the data burst and there are Windows versions (put that old Desktop to use or use a Tablet). I have had great success using the iPad application and an Android app my Samsung Note 3.

- **Are you in area not presently being covered?**
- **Do you have a topic in mind you would like featured?**
- **Do you have good knowledge about a radio communication system? Interested in sharing?**

We would like to hear from you. Send inquiries to:

ScannerDigest@gmail.com

The ACARS avionics architecture in a typical airplane

The drawing illustrates a typical architecture for ACARS-related avionics in an airplane. The ACARS Management Unit (MU) is the heart of the Datalink System. The MU receives and sends messages through a VHF radio. The VHF radio provides communication with ACARS Remote Ground Station within line-of-sight, up to approximately 200-250 nautical miles from the airplane at cruising altitude.

On long-range Boeing 767 airplanes the MU is also connected to a SATCOM system which provides communication when flying over remote areas where there are no VHF remote ground stations. This would be in the middle of the ocean for recent lost planes.

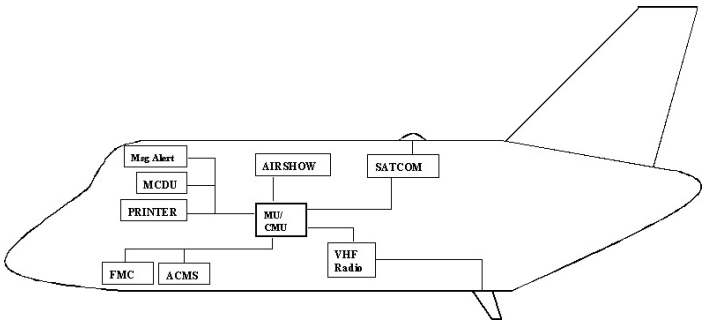
An alternative or complement to SATCOM for long-range communications is High Frequency Data Link (HFDL).

The pilot's main interfaces with ACARS are the Multi-Function Control and Display Unit (MCDU) and the Cockpit Printer. The MCDU displays ACARS menus and pages. A keyboard allows the pilot to navigate through the ACARS system, select applications and enter data.

Downlink messages are sent manually by the pilot or automatically by the MU. They can also originate from another end-system like the Aircraft Condition Monitoring System (ACMS), the Flight Management Computer (FMC), or the Airshow system.

Most uplink messages are meant for the pilot and will be forwarded by the MU to the cockpit printer. Some uplink messages are sent only for display on the MCDU if a printout is not required. Depending on type of message and the phase of the flight, a message alert in the form of a chime and a light may be activated to bring the pilot's attention to the message.

This is an old technology but works just like text messages.



The software to decode ACARS can be found on the following links:

ACARS PC - ACARS decoder for Linux & Windows - www.**acars**d.org

ACARS MAC - http://www.blackcatsystems.com/software/multimode.html

ACARS Apps - http://www.blackcatsystems.com/ipad/iPad_ACARS_Pad.html and http://www.blackcatsystems.com/droid/acars.html

I saw the AOR ARD-2 ACARS/Navtex standalone decoder in Japan at a radio shop for about $200 used. I was curious to see the scanner was sitting on 131.450 Mhz and found out that they were decoding ACARS, when I did a frequency look up. The shop owner scribbled down some information on the software they were using.

http://sky.geocities.jp/kgacars/indexworld.html

You can easily take an older Desktop PC, a 10 channel scanner and a coat hanger antenna and set up a dedicated ACARS listening post.

jetcos ACARS listening post

The dongle fanboys can also take this route http://www.rtl-sdr.com/rtl-sdr-radio-scanner-tutorial-receiving-airplane-data-with-acars/

Frequency Band Plan

130.425	Additional USA
130.450	Additional North America
136.775	Air Canada, Air Transat, American, Delta, JetBlue, United
136.800	Additional USA
130.025	Secondary channel for USA and Canada
129.125	Additional channel for USA & Canada
130.425	Additional USA
130.450	Additional channel for USA & Canada
131.125	Additional channel for USA
131.500	Primary Channel Worldwide
131.550	Primary North America
136.700	Additional channel for USA
136.725	Delta
136.750	Additional USA
136.675	Delta and Jet Blue
136.800	Additional channel for USA
131.725	Primary channel in Europe on SITA Network
131.525	European secondary
131.475	Air Canada company channel Dataplus Network (private)
131.450	Primary channel for Japan/China
136.900	European secondary
136.925	ARINC European Channel
136.850	SITA North American Frequency
130.450	Overflow ACARS channel Washington, Boston, Chicago, and DFW

Check out these presentations on ACARS on the SITA Network:

https://www.**sita**.aero/file/2198/**SITA**_AIRCOM_Service.pdf

This mode enables you to decode an aircraft ACARS transmission, the first 26 characters of the ACARS signal is received in the following sequence:

A typical message will look like this for a Delta A320 travelling from SFO to YYZ

.N318US Q1 4229AL0604SFO073107430 300YYZ

Tail Number N318US Delta
Message Type Q1
Out 0731
Off 0743
Fuel 0300
Destination Toronto

The following link shows a great document with more in-depth information on the ACARS message format and technology.

www.ohio.edu/people/uijtdeha/**ee6900**_fms_08_**acars**.pdf
http://www.ohio.edu/people/uijtdeha/ee6900_fms_09_fmc_cdu.pdf

The link below is an interesting read on ACARS and the 9/11 airplanes and explains a lot of detail on how the actual messaging system works.

http://pilotsfor911truth.org/ACARS-CONFIRMED-911-AIRCRAFT-AIRBORNE-LONG-AFTER-CRASH.html

These disappearing planes always have the tension of trying to locate the black box. Wouldn't it be better if the data was transmitted and stored in the cloud? I really think so.

http://www.wired.com/2011/06/ff_blackboxes/

'Black-Box' in 'The Cloud' is the technological leap in live-streaming of 'black-box 'data to be gained from the Missing MH370 Mystery and its disaster response and recovery.

Indeed, "Canadian airline *First Air* will soon become one of the few in the world to have the option to live-stream black-box data in the event of an emergency – and the technology they are using is all Canadian made,". "FLYHTStream," made by **Calgary-based FLYHT Aerospace Solutions,** permits safety experts to have "instant access to the flight data and cockpit audio recorder in the event of an emergency – whether it be system failures, or some catastrophe, like a crash," reports Global News. During an aircraft safety breach, the Automated Flight Information Reporting System (AFIRS) retrieves back live 20 seconds of 'black-box' data from the point at which the aircraft safety mishap or flight security breach began, and immediately streams the data to a secure server. The pilot can activate FLYHTStream inside the cockpit. FLYHTStream software also can be pre-programmed to automatically switch on during an aircraft safety mishap or flight security breach. Live-streaming flight data rehabilitates antiquated aircraft accident investigations, making possible specialized animations that recreate what happened during aviation mishaps. This is extremely valuable, if future mishaps, like MH370 or Air France 447 occur, whereby safety investigators have had to wait months, even years, to retrieve conventional black-boxes lost in remote areas, including deep hazardous oceanic corridors of the world. Live-streaming can also be actuated from ground-base air traffic controls

.

"If one of the dispatchers happened to see something unusual going on with the aircraft, they could push a button, and it would start streaming the data to the ground," said Vic Charlebois, vice president of Flight Operations for Canadian airline *First Air*.

Happy Scanning!

John Leonardelli VE3IPS

I am trying to locate the new Alinco scanner…can anyone help?

RAILROADS

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Sorry, no column this issue

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Sorry, no column this issue

Scanner**Digest** Newsletter

Welcome to the Scanner Digest Newsletter! We're currently publishing quarterly e-magazine containing information for the scanner hobbyist. If it can be monitored on a scanner, we'll attempt to cover it from 30 to 1300 MHz and beyond!

Our purpose is to produce a newsletter to facilitate the exchange of information pertaining to the various services covered by a typical scanner radio. Dedicated regional column editors make up the heart of this publication.

The Scanner Digest Newsletter is not responsible for the accuracy or consequences incurred regarding the use of information listed in this publication. Since the purpose of this newsletter is to provide a platform for the submission and exchange of radio communication information, it thus becomes impossible to deem all contents as accurate. The very nature of radio licensing and usage makes it difficult to verify the accuracy of the information contained within. Generally information listed within the pages of the newsletter are derived from multiply sources including current FCC files, hobbyists and those directly involved with various public safety agencies.

Scanner Digest's policy has been not to limit or edit the individual columns submitted, unless we deem the information sensitive in nature which may jeopardize the safety of the parties involved. Only in this case will we edit out this type of input. (Example: We will not publish the frequencies used by a law enforcement surveillance team.)

Naturally the comments of the various column editors are not necessarily the views and opinions of the Scanner Digest Newsletter. All materials, maps, information, photographs submitted to a regional column editor or to Scanner Digest directly, become sole property of the Scanner Digest Newsletter. We encourage and will make every effort to give proper credit to all submissions. All contents within are copyrighted. ©2003-2015

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