



Northwest Regional Aviation 2019 Annual Communications Exercise NWRA COMMEX 2019





EXECUTIVE SUMMARY NWRA COMMEX 2019

Northwest Regional Aviation (NWRA) together with our military aviation partners and numerous local, county, and state agencies successfully planned, coordinated and executed the fifth annual Regional Aviation Communications Exercise on March 7, 2019.

The COMMEX involved all UASI partners and included Federal (FBI, DEA, CBP), military (USCG, Washington National Guard), WSP, WSDOT-Aviation and the State EOC. This exercise tested and evaluated regional interoperable radio and video downlink systems between local, state and federal aviation agencies.

Coordination, tracking and communicating with 10 aircraft at one time took place during the exercise. The COMMEX provided confidence testing of interoperable communications and video downlink reception with regional Emergency Operations Centers, Public Safety Answering Points and Mobile Command Vehicles. This capability supports informed decision-making by regional policy-makers during planned or unplanned disasters or other events.

Primary focus during the COMMEX was the region-wide civil/military TRIS Radio Communications Patching to the Federal Integrated Wireless Network (IWN) and the use of Non-Federal VHF Mutual Aid (VTAC) direct radio channels. These radio channels will prove vital during any large scale event involving multiple agencies and multiple aircraft.

The COMMEX demonstrated our region's ability to:

- Support both the Regional Inland and USCG JHOC Mission
- Establish a Multi-Agency Coordination System
- Manage and track Regional Aviation assets
- Communicate with all fixed and mobile command assets
- · Further identify areas of communications systems needing improvement

Bill Quistorf

Mondragon

Bill Quistorf, Co-Chair

UASI Avn Sub-Committee

Ron

Ron Mondragon, Co-Chair UASI Avn Sub-Committee



OBSERVATION

The "Northwest Network" works well once it is established and function tested. Know that this network will tie in the entire region and can be used for overall coordination and to talk to government aircraft even if they are not located in one of the sectors (North, Central, or South). This network should not be used to coordinate missions, but can be used to request specific aircraft tune to a VTAC channel (VHF-FM) or STATE OPS channel (800 MHz).

The VTAC channels work well and can be used in each sector as outlined in the EAP:

- South Sector VTAC 11
- Central East Sector VTAC 12
- Central West Sector VTAC 13
- North Sector VTAC 14

ISSUE

Limited communications from "Seattle Command" on 123.1 VHF located at the JHOC. This handheld Air Band radio currently has very limited range especially when used in an area surrounded by high-rise buildings.

RECOMMENDATION

Long "Whip Antennas" should be acquired, installed and used when communicating on the hand held Air Band radios. This will allow much further range for transmitting.



John MacArthur in front of displays at WSDOT-Aviation showing aircraft tracking on both Spidertracks and the ADS-B systems.

ISSUE

Pierce County DEM was unable to communicate over the patched "Northwest Network" during the first part of the exercise. The Exercise Communications Coordinator checked in with the all participating PSAPs on the day of the exercise to ensure the radio patches are in place for the Northwest Network. He conducted the initial ground communications check at 12:45 and verified all PSAPs were participating to ensure that the patches are in place and working.

RECOMMENDATION

It is important that the participating Emergency Management Departments and EOC's have the 800 MHz radios available and staffed during the exercise in order to test the patched system. If an agency is unable to staff the radio's let the Exercise Communications Coordinator know prior to the start of the exercise so that the information can be passed on to participants.

ISSUE

Very limited reception on the handheld video downlink receivers when used at the JHOC. This is likely due to the surrounding high-rise buildings which interferer with direct line-of-sight between the downlink aircraft and the handheld receivers. Seattle Command thought the issue was some aircraft transmitting encrypted downlink, but that was not the case. All were transmitting un-encrypted.

RECOMMENDATION

Seattle Command should rely on the ISP video link associated with the Seattle Omni receiver. Seattle EOC uses this link and had good reception from the downlink transmissions from KCSO and SCSO. The handheld receivers must be positioned for good line-of-sight with the aircraft, something that is difficult to do in the urban areas.

ISSUE

City of Seattle EOC is getting good reception on nearly all the radios/channels. If the JHOC building is to be used as an additional EOC for mutual response, then the communications hardware, specifically the antenna array, should be planned out and installed

RECOMMENDATION

Identify which radio systems and downlink systems are to be used at the JHOC and develop an approved plan, acquire funding and establish a timeline to support installation of the systems.

OBSERVATION

NWRA should conduct the COMMEX each year to continue to test and validate the regional communications system in the region. Our state, federal and military aviation partners are vital to emergency response efforts during any large scale events. It is important to function test the communications to know where the limitations are and to ensure pilots are familiar with the various radio channels that are not used on a routine basis.



2019 COMN	MEX RES	ULTS FF	0000as of 0	3/27/2019							2019	COMM	EX RES	JLTS										
Write Results	LC = Loud & Cle	= Loud & Clear, G = Garbled, S = State, W = Weak, No = Not Programmed, NIA = Radio Not Capable of Frequency, NIC = No Contact																						
	FREQUENCY	RADIO	AGENCY: CALL SIGN:	WSP SMOKEY		SNOHAWK		AIRLET		ALNW 5	ALNW 6	FBI	Ohmaha	USCG	Oympic	Air Ops		LC WAANG	Sno CEM Snohomish Cmc	Pierce DEM Pierce Cred LC: Guardian	Seattle PD/FD Seattle Cmd		Tukwila Cmd	
	123.1	VHF-AM			LG 266 000	Wi Seni COO	LC Seattle Cond	NG Seattle Could LG State COO	NG state soc	LC: Seattle On d				NC: Seattle Quid NC: Seattle Quid	LC: Fletce LC: SnoHavik	LC: USCG	LC: Pierce	LC: Snoravk		LC: Pierce LC: SnoHawk	LC: Pierce			
					LC Olympia za Ops	LC: Obmips Ar Ops	LC: Olympia Air Olis	LC Christa Ar Op	e EG Oyeyea Kir Oy	LC Olympia Ar Ope			LC: Olympic Ar Oss	LC: Olympia Ar Ops	LC: CBP	LC: Airtfl 3	LC: CBP	LC: Airtf 2	LC: SnoHavk	LC: ALNW	LC: AHR 5			
	SCAIROP1	800 MHz			LC: several or	eLC: Sourcesak Co	LC towns or	aLC Subaran Cr	•	LC: Sources Co	LC: testernal Cri			NO					LC Suardian LC Pierce					
												LC: Esteve Co	LC: Season Cred of LC: Bellevie Cred	C. Bellevie Ond					TC Aritt 2, 6					
orthwest Network	IWN	VHF										LC: YANTA OIL	LC: Yake Ba Cod											
	PSOPS N2				LC, Seate One	LG. Seatle Over	LC. Seate One	LC testaces		LC Sarte Ove		U. Pene Co.	NU. Nesecos					LC: Plerce			LC: Guardan	LC Quardian G: Snot-lawk	LC: Guardan	LC: Guar
rthwest Network		800 MHZ				NC: Navita One		LC: Yawta Ond		LC: Name of the		-		NO				LC:CSP			LC: SnoHank LC: Fierce	LC: Pierce LC: Fill LC: ALWA	LC Pleace	LC: Pic
	KC IO 07				C Releva Cod	G. Bellevus Cro	C Releva Cres	C' Edina Cra	4	C' Releva Cor								LC USCS			LC:ALNW2 LC:ALNW5	LC: CBP LC: USCG	LC: CBP	LC: CE
	PSOPS N3																		LC: Cuardian LC: Srothlank LC: Pierce					
rthwest Network		800 MHZ			LC: secto	LC section	LS: See Co	LC: See Co One		LC see to one	LC: sea Co Core		_	NO					LC ORP					
	MA PC 2				2000		.01							NO					LC: FBI					
rthwest Nebwork	MA PC 2	800 MHZ			LC: reacou	NC: Peu Ore	LC Person	NC Persons		LG: Perce Cod				NO										
	ST OPS 2D	800 MHz			LC: See Co Code	NG: See Co Core		LC: See Co On		EC: See Co Con	NG: Sno Gr Cno			NU					E.C: Guardian					
																			LC SvoHawk					LC Oue
	ST OPS 3D	800 MHz			I C' Seath One LC tubels One		LC towns one	I G'Sweeter	nd LC Takets O	I Creek out				NO							LC: Guardian	LC: Osardian	LC: Guardan	LC Stol
					LC serve cod			LC: seawarche		LC: seeme cw											LC: Snortswit	S ALMW	LC Pierce	LC: AL
					NC Fave Col	NC Fave Ont	C FerreCol	NC Flore Ont	NC PanaCod	LC Days Cont														
	ST OPS 5D	800 MHz						10. Fare 1.00	M. Farat.m	U. Paratre				NO										
					NC: Olympia Air Op	s NC: Olympia Air Os	ps NC: OyegisAr Op	NC: Oyngia Ar Co	is NC Olympia Air Opi															
					LC: Persions	LC. Parci Ced	LC: Perce Ont	LC Para Crd	LC. Perce Crel	LC: Parce Ced					LC: Pierce	LC:Ant2				LC Plorce			LC: Snothersk	
	VTAC 11	VHF-FM			LC: Oyner Ar Os	LC Oprovario	pa LC: Olympia Air Op	LC: Opmpia Air Op	s LC OyequiArtq	LC Oprious Co					LC: Surface LC: Stateback					LC Sures LC Sures LC Ass			LC Rece	
																				S: WAANG				
																							LC Guardan	10:0
					LC Tuesda Ond	LC: turnits One	LC: tubers one	NC: Falentia Cred		LC: Turnelle Cred			LC: televis Cris	LC: serve on									LC Pierce	LC Gua
	VTAC 12	VHF-FM							_														LC: WAANG	LC Snot
					LC serve cro	LC: seeva cro	LC: serve on	NC: sere use care		LC: nessus cve						1		1						LC: Pier
													_											

2019 COMMEX RESULTS FF0000as of 3/27/2019										2019	ОММЕ	X RESU	ILTS										
				I C Relevan Cont	I G'Releva Cost	IC Selese Ord	NC: Selevie Ont		I G' Selevie Cree														
																				LC: Onol lawk	LC Guardian		
											l .									LC: Pierce	LC Stollank		
	VTAC 13	VHF-FM		NC: Seath Ond	IC makes	10	NC supposed		LC: Swelle One		l .	W. Seatle One	Want							LC WAANG	IC Piece		
	V and 10	****		NO. SAME OIL			IIO SERECIO					Tr. Sente Site.	11. DEBOTOR								LC WAANG		
											l .									W USCG	LC: USCG		
																					TC:ALW		
	VTAC 14	VHF-FM									l .							LC.Guardian					
	VIAC 14	VHF-FM																LC Stroftlank					
				LC: Sto Ca Cred	LC See Co Cons	LC. secución	LC: See Co Cod	4	LC See Co Cord	LC: Sea Co Cree	4	LC : See Co Ord	LC: secoone										
-																		LC USCG LC:WAANS					
-																		LC ALNIV					
																		CC PEPH					
	no transcri	100								_	1	-											
	MAR 81A	VHF-FM								_	1											LC: WAANG	
										_	1												
								2000						i I									
	OSCCR	VHF-FM						NG: Parox Cnd															
																					LC Overden		
	KC MARS	VHF-FM/800					1								1						FC Olsage		
	NC MARS	VFF-FM/800					1				l .										LC WAANG		
																					LC WOONS		
				LC: Pleas Ond	LC: Olympia									LC: Snonavk			LC SnoHawk		LC: Pierce		LC: Shortairk	LC SniHawk	
	CH 3 - 6505	Downlink				LC: Pierce Crid								CO. DIROTORIA			DOI OFFICE NAME.		LC: Buerdan			Co stra fam.	
					LC: Stew GOO									LC: Flore			NC: Quardian		LC: Onel lewk		LC: Plotto	NC: Guardian	
				0.0000000	LC: Pierce Cmd														20000000		20101000		
	CH 4 - 6513	Downlink		NC: seem one	LC: Seatte Cred	LC: Seattle Cric																	
																				LC: SnoHawk			
	CH 5 - 6521	Downlink		NO. Bio One	L.C. Sero Co Crox	LC: Site Co Cite												LC: SnoHavk		I C Pierce			
				NC: sucres circo	NC sauce on	NC seven one																	
	CH 6 - 6498	Downlink		NC: Belevue Ond													NC: Quardian					NC: Guardian	
														.C: SnoHawk					LC: SnoHawk		LC: SnoHawk		
Aircraft Tracking	Spidertracks	Internet		1			1				l			.C: Guardian					LC: Guardan	1	LC: Guardan		
			- 1			_																	

Al Escalera (aescalera@sunnyside-wa.gov)[aescalera@sunnyside-wa.gov]; Alan Dryer[Alan.dryer@bnsf.com]; Anderson, Chris Captain WDFW[Chris.Anderson@dfw.wa.gov]; Bill Tensfeld (bill.tensfeld@co.whitman.wa.us)[bill.tensfeld@co.whitman.wa.us]; Bob Johnson[johnson@kittcom.org]; Bob Lincoln - SPokane Regional Emergency Communications Systems (BLincoln@spokanecity.org)[BLincoln@spokanecity.org]; Bob Udell (Robert.Udell@co.Yakima.wa.us)[Robert.Udell@co.Yakima.wa.us] Brad Coughenour (brad.coughenour@yakima.wa.gov)[brad.coughenour@yakima.wa.gov]; Captain Richard Mann (mannrpm@dfw.wa.gov)[mannrpm@dfw.wa.gov]; Clyde Weik - King County Radio Communications Services (Business Military Name Fax)[IMSEAFAX-Clyde+20Weik+40206-205-1375@wsp.wa.gov]; Clyde Weik (clyde.weik@klngcounty.gov)[clyde.weik@kingcounty.gov]; Damien Thompson (dthompso@up.com)[dthompso@up.com]; Dave Fuller -CRESA (Dave.Fuller@ctark.wa.gov)[Dave.Fuller@clark.wa.gov]; Dean Hane - Multi Agency Communications Center (Grant Co.) Military Name & Emai (d.hane@macc911.org)[d.hane@macc911.org]; Dean Heistand[DHeistan@co.kitsap.wa.us]; Douglas D. James - DEA Seattle Field Division (Doug.D.James@USDOJ.GOV)[Doug_D.James@USDOJ.GOV]; GRAYS HARBOR COMMUNICATIONS 3605338765 [DISPATCH@GH911.ORG]; Hunt, Jeff[JHunt@SpokaneSheriff.org]; Jeff King[JeffK@co.klickitat.wa.us]; Jeffrey D. Ross - Department of Justice JPO/IWN (jeff.ross@usdoj.gov)[jeff.ross@usdoj.gov]; Jim Cole - Clark Regional Emergency Services Agency (jim.cole@clark.wa.gov)[jim.cole@clark.wa.gov]; Jim Semmens (jims@wsgc.wa.gov)[jims@wsgc.wa.gov]; John C West - US Forest Military Email Servise (jcwest@fs.fed.us)[jcwest@fs.fed.us]; John McIntosh (John.McIntosh@dfw.wa.gov)[John.McIntosh@dfw.wa.gov]; Tim Lenk[tim.lenk@piercecountywa.gov]; Kathleen Slaybaugh (kbslaybaugh@co.garfield.wa.us)[kbslaybaugh@co.garfield.wa.us]; KITSAP COUNTY DEM Jason McMillan 3603075877 [JMCMILLAN@CO.KITSAP.WA.US]; Krajewski, Hank[Hank.Krajewski@kingcounty.gov]; Military Name McDonald, Russell -PS[russellmcdonald@fs.fed.us]; Michael Dobbs - West Pierce Fire and Rescue (Michael Dobbs @westpleice org)[Michael Dobbs@westpierce.org]; Michael Dobbs - West Pierce Fire and Rescue (mike.dobbs@alcatel-lucent.com)[mike.dobbs<u>@alcatel-lucent.co</u>m]; Phill<u>ip Tracy (ptrac</u>y@dol.wa.gov)[ptracy@dol.wa.gov] @swfpac.navy.mil @swfpac.navy.mill; Military Email swfpac.navy.smil.mil]; Ray Hawkins - Pierce Transit @swfpac.navy.smil.mil) (rhawkins@piercetr<u>ansit.org)</u>[rhawkins@piercetransit.org]; Scott Baugh - ATF Field Communication Services Branch (Douglas_S_Baugh@usdoj.gov)[Douglas.S.Baugh@usdoj.gov]; Scott Hatfield - EPSCA (DSHATFIELD@redmond.gov)[DSHATFIELD@redmond.gov]; Semmens, Jim (GMB)[jim.semmens@wsgc.wa.gov]; Sgt. Brian Military Email Fairbanks[brian.fairbanks@dfw.wa.gov]; Sheriff Rocky Miller (rocky_miller@co.columbia.wa.us)[rocky_miller@co.columbia.wa.us]; Steve Krigbaum (stevek@co.whitman.wa.us)[stevek@co.whitman.wa.us]; Steve Taylor - City of Tacoma (STAYLOR2@ci.tacoma.wa.us)[STAYLOR2@ci.tacoma.wa.us]; Steven Ruley (Sruley@wallawalla.wa.gov)[Sruley@wallawalla.wa.gov)] Terry Knight - DHS / FEMA (Terry.Knight@fema.dhs.gov)[Terry.Knight@fema.dhs.gov]; Tim Lenk[tim.lenk@piercecountywa.gov]; Tim McDowell (McDoweT@wsdot.wa.gov)[McDoweT@wsdot.wa.gov]; Tom Mahon - WADNR

(Tom.Mahon@dnr.wa.gov)[Tom.Mahon@dnr.wa.gov]; Tony Minor - King County Radio Communications Services (Anthony.Minor@kingcounty.gov)[Anthony.Minor@kingcounty.gov]; Trent Stephens[trent.stephens@piercecountywa.gov]

From:

Sent: Tue 11/6/2018 11:47:10 AM

Pratt, Dave

Subject: Land Mobile Radio System Upgrade Project Update

Good Afternoon.

The Washington State Patrol is currently underway on a project to update the Land Mobile Radio (LMR) System's core, as part of the Land Mobile Radio System Update Project (LMRSUP). As a part of this effort, WSP will relocate the LMR system core from its current location in Yakima, to the state data center in Quincy and link it with the FBI's LMR system. We will also develop and install a new code plug (programming) for our radios and upgrade the NICE recording systems used in WSP's dispatch centers across the state.

We anticipate minimal impact on LMR operations as a result of the project. Cutover to the new core is anticipated to occur in later March or early April, 2019, at which time operations should be impacted very briefly. Following that, we plan to upgrade each of our districts' dispatch centers in a wave that will last for several weeks, but which should impact operations minimally and for less than two hours for each district. In all cases, we will target the specific cutovers to occur on dates and times when operations are at their lowest levels.

More planning is being done as this message is being written. We plan to deliver future updates monthly over the next few months and then more frequently, as our plans mature and the situation warrants.

If you have any questions or concerns, please do not hesitate to contact me at the phone numbers and email address listed below.

Thanks,

Dave

Dave Pratt, PMP Project Manager WSP LMR System Upgrade Project Mobile: (360) 791-6531

Office: (360) 596-4910