

Spotlight on Soviet Far East

SOVIET FAR EAST MEDIUM WAVE STATIONS

by Randy Seaver

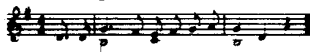
INTRODUCTION

For the North American DXer, the Soviet Far East includes the Russian territory from the Yenisey River on the west to the Pacific Ocean in the east, and from the China and Mongolian borders on the south to the Arctic Ocean in the north. The terrain is predominantly plateaus and mountains, with several large rivers and lakes. This area is approximately 40% of the entire Soviet Union, yet has only 5% of the population. The population tends to concentrate on the Trans-Siberian Railroad line and on the shores of the lakes, rivers and oceans; three-quarters of the people live in urban areas. The largest cities are (1970 census): Krasnoyarsk (648,000), Irkutsk (451,000), Vladivostok (441,000), Khabarovsk (436,000), and Komsomolsk-na-Amure (218,000). The Novosibirsk area has a population of about 3.5 million people. Russians constitute the vast majority of the population in the southern areas, with concentrations of Ukrainians, Belorussians and Jews, while the small indigenous population lives mainly in the north and central rural areas. The Russian language is spoken by nearly the entire population. The entire region is administratively part of the Russian Soviet Federated Socialist Republic.

SOVIET RADIO PROGRAMS

The state radio broadcasting system is a very structured organization. All broadcasting activities are formally under the control of the State Committee for Broadcasting and Television, which is responsible to the Council of Ministers. In the radio system, there are three national home service programs, several republican programs, local programs and a city program; in addition, there are two foreign service programs. Each program that can be heard on medium wave in WCNA is briefly described below. The interval signal used for each program is also described.

1st Program - This national home service is a general style program intended for nationwide coverage. It is relayed in part by many local stations; there are four editions of the program because of the vast time differences between East and West. Edition 1B is broadcast to Eastern Siberia (between the Yenisey and Lena Rivers) 2100-1700, while Edition 1A is broadcast to the Far East 1900-1500. The programs in the local evenings (i.e. 0800-1500 CUT) often are symphony, opera, etc. Six time pips are heard on the hour. The interval signal is played before the hour and is the same as heard on the Radio Moscow External Service; it has 10 notes and has been historically called "Kremlin bells" by NA DXers:



2nd Program - This national home service is called the Mayak (Lighthouse) program and is intended for nationwide coverage. This is a musical (all kinds of music), news and sports program. On the hour and half-hour there are 5 to 10 minutes of news, interviews or special reports. The primary channels are 548 and 575 khz, plus local relays. Six time pips are played on the hour. Before the half-hour (8 notes) and the hour (10 notes), the Mayak interval signal is repeated four times; this IS has historically been called "Midnight in Moscow" chimes by NA DXers:



MEDIUM WAVE BROADCASTING STATIONS

The medium wave transmitters in Eastern Siberia and the Far East, their official powers, schedules (with an emphasis on the time period 0700-1730 CUT), and any pertinent remarks are listed in Table 1; this data was obtained, for the most part, from the 1977 World Radio and TV Handbook. Table 2 lists the transmitter sites in alphabetical order, with their geographical coordinates, and the great circle distance and true bearing from three West Coast locations - Seattle, San Francisco and San Diego.

West Coast North American reception of several of the Soviet Far East stations can be a near-daily occurrence during September through April with a relatively quiet geomagnetic field and the permission of the ubiquitous midwinter anomaly. The strongest outlet heard regularly is on 647 khz, if the receiver is away from KFI-640. The outlet on 840 khz is received frequently with some QRM from the co-channel Korean, Japanese and Chinese outlets. The three low-band frequencies of 548, 575 and 584 khz are occasionally heard (depending on local QRM), as are the higher frequency outlets on 1376 and 1525 khz. The 665 outlet is heard occasionally with a big signal but fairly weak audio. The station on 782 is hampered by KCRL-780 QRM. The outlet on 973 khz is heard rarely - this is an old transmitter and the audio always seems to be mushy. The stations on 629 and 1250 khz were heard frequently during the 1960's but, due to the increasing number of stations on 630 and 1250, they are not heard now with any regularity.

West Coast reception of the inland stations (generally, those between 80 and 100 East longitude) is much more difficult, due to the propagation paths near or through the auroral oval. These locations include Abakan, Novosibirsk, Dudinka, Kyzyl and Yeniseysk. Other stations, such as Verkhoyansk, Chita, Ulan-Ude, Bodaybo and Yakutsk are further east; these can be heard rarely during very quiet geomagnetic conditions on the West Coast of North America. Reception of all of the stations listed should be possible in Hawaii and the Pacific Ocean area, depending on local QRM.

3rd Program - This is mainly a musical and literary program transmitted to European USSR, the Novosibirsk area and Kazakhstan.

Local Programs - Most districts (krays, oblasti) have their own local programs which are broadcast a few hours each day. These programs consist of local news and weather, press review and locally produced features. Programs in local languages are also provided in some areas. No interval signal or pips are used during most of these programs.

City Program - There are locally produced evening programs broadcast in some major cities. The program content is local news, weather, current events, music, opera, etc. These programs have been heard with 6 pips on the hour without an interval signal.

Radio Moscow External Service - Radio Moscow broadcasts on a 24 hour basis in many languages on medium wave and short wave. Medium wave broadcasts are usually directed to countries adjacent to the transmitter sites. The programs are propagandist in nature with talk, marches, singing, etc. The programs are scheduled in one-half hour blocks with the Radio Moscow interval signal (10 notes - the same as the First home service IS) played before each hour and half-hour. At times, the various transmitters may switch back and forth to the Radio Station Peace and Progress program. The Radio Moscow interval signal is:



Radio Station Peace and Progress - "The Voice of Soviet public opinion" broadcasts at times on Radio Moscow channels. The interval signal, played before the start of the next program, is 6 notes on two clarinets:



Freq.	Location	KW	Pgm	Schedule	Remarks
548+	Yakutsk	50	2	1900-1800	This frequency is heard occasionally. Probably a combination of Svobodnyy, Vladivostok and Magadan, since Yakutsk is far inland.
	Svobodnyy	150	2	1900-1800	
	Vladivostok	150	2	1900-1800	
	Magadan	50	2	1900-1800	
566+	Yeniseysk	50	?	?	- Not heard WCNA due to inland location.
575+	Novosibirsk		2	2200-2100	This frequency is heard semi-regularly. Probably a combination of Khabarovsk and Petropavlovsk is heard since Novosibirsk and Chita are inland.
	Chita (or Irkutsk)	500	2	2300-2200	
	Khabarovsk	150	2	0300-0200	
	Petropavlovsk-Kamchatskiy	50	2	0300-0200	
584+	Svobodnyy	500	RM	CC:0730-0800,0830-1100,1130-1430,1500-1730.	This outlet is heard semi-regularly.
			PP	CC:0700-0730,0800-0830,1100-1130,1430-1500.	
593+	Yeniseysk	150	2	?	- Not heard WCNA due to inland location.
611+	Krasnogorsk	100	?	?	- This is on Sakhalin and should be possible WCNA.
620+	Unknown Far East	?	1	1900-1800	- Not heard WCNA - wonder if it's on?
629+	Khabarovsk	100	RM	JJ:0800-1100,1200-1230,1300-1330,1400-1430.	This is rarely heard due to 630 QRM. Note the breaks in the listed program.
			RM	CC:0730-0800,0830-0930,1030-1100,1200-1330,1400-1430,1500-1730.	
647+	Iman	1000	RM	CC:0730-0800,0830-0930,1030-1100,1200-1330,1400-1430,1500-1730.	Best Soviet outlet - heard regularly. Note the switching between languages and between Radio Moscow and Peace and Progress
			RM	KK:0930-1030,1100-1200,1330-1400.	
			PP	CC:0700-0730,0800-0830,1430-1500.	
			PP	MM:1030-1100,1130-1200,1245-1315,1430-1500.	
656+	Verkhoyansk	50	?	?	- Heard rarely due to northern location. Korean QRM
665+	Komsomolsk-na-Amure	100	1,L	2000-1700	- Heard occasionally, good carrier, poor audio.
	Dudinka	50	1,L	2300-1800	- Not heard WCNA due to inland location.
683+	Abakan	30	1,L	2300-1800	- Not heard WCNA due to inland location.
690?	Anadyr	50	1,L	1800-1200	- Not heard recently due to 690 QRM. This should be heard if frequency is clear.
			2	1200-1500,1600-1800	
710+	Blagoveshchensk	50	?	?	- Not heard recently due to 710 QRM.
782+	Spassk-Dalniiy	75	1	1900-1500	- Heard occasionally with KCRL QRM.
800+	Ulan-Ude	1000	1	2100-0800	This has not been heard WCNA due to 800 QRM and inland location.
			RM	CC:0900-0930,1330-1430,1500-1730.	
			RM	MM:0930-1030,1200-1245.	
			PP	MM:1030-1100,1130-1200,1245-1315,1430-1500.	
810	Vladivostok	150	1	2200-0830	Heard rarely with KGO off.
			C	0830-1400	
	Bodaybo (?)	50	2	2100-2000	- Not heard WCNA due to inland location.
827+	Kyzyl	50	1,L	2300-1800	- Not heard WCNA due to inland location.
840-3	Spassk Dalniy (?)	50	2	?	- Heard regularly with Korea, China, Japan QRM.
973-	Yuzhno-Sakhalinsk	50	1,L	1900-1400	Heard rarely due to poor modulation. Sked in Korean 0835-0900.
			2	1400-1800	
998+	Birobidzhan	25	2	2000-0900	- Not heard recently WCNA. This may also be location for clandestine "Hongchih Kwangpo" (listed 995) to China.
1010-2	Magadan	50	2	1800-1700	- Heard occasionally with domestic, LA and JONR QRM
1025+	Novosibirsk	200	3	0400-1500	- Not heard WCNA due to inland location.
			RM	CC:1500-1730	Not heard WCNA due to inland location and domestic QRM.
1079+	Kyzyl	500	RM	CC:0900-0930,1330-1430,1500-1730.	
			RM	MM:0930-1030,1200-1245.	
			PP	MM:1030-1100,1130-1200,1245-1315,1430-1500.	
1120	Yerofey Pavlovich (?)	?	2	2100-1600	- Not heard WCNA due to inland location.
	Unknown Far East	?	2	2000-1500	- Not heard WCNA - may be Yerofey Pavlovich.
1150?	Komsomolsk-na-Amure	30	2	2000-0900	Heard rarely due to domestic QRM and low power.
			C	0900-1400	
1169+	Ulan-Ude	250	RM	CC:1330-1430,1500-1730.	Heard rarely due to inland location and domestic QRM
			RM	MM:0930-1030,1200-1245.	
			PP	MM:1030-1100,1130-1200,1245-1315,1430-1500.	
			PP	MM:1030-1100,1130-1200,1245-1315,1430-1500.	
1250+	Vladivostok	1000	RM	JJ:0800-1100,1200-1230,1300-1330,1400-1430.	In the 1960's, this was the best Soviet outlet, but heard rarely now due to domestic QRM. Note the breaks in programming. Is WRTN correct?
			RM	KK:1330-1400.	
			RM	CC:1500-1730.	
1313+	Unknown Far East	?	2	0300-2200	- Not heard WCNA recently. May be obsolete listing.
1367+	Novosibirsk	500	RM	1230-2100	- Not heard WCNA due to inland location. Detailed schedule not in WRTN.
1376+	Vladivostok	30	1	1900-1500	- Heard occasionally.
1475+	Vladivostok	150	RM	CC:1500-1730	Heard occasionally after 1430. Watch out for Radio Malaysia in 1100-1300 time period.
			PP	CC:1430-1500	
1525-4	Khabarovsk	?	2	?	- Heard occasionally with fair signals. Probably 50 KW.
1570	Khabarovsk	?	2	2000-0900	Not heard due to domestic and HLDA QRM.
			C	0900-1400	
			2	1900-1400	
1586+	Yuzhno-Sakhalinsk	5	2	1900-1400	Not heard recently WCNA; low powered.
	Khabarovsk	5	?	?	

Program Notes: 1 - First home service; 2 - Second home service; 3 - Third home service;
 L - Local program; C - City program;
 RM - Radio Moscow External Service; PP - Radio Station Peace and Progress.
 Language Abbreviations: JJ - Japanese; CC - Chinese; KK - Korean; MM - Mongolian.

I numbers indicate Nov '78 frequency changes.

F30-3-3

TABLE 2 - SOVIET FAR EAST STATION LOCATIONS

City	Latitude	Longitude	Great Circle Distance (statute miles) and Bearing (degrees east of north) for:		
			Seattle	San Francisco	San Diego
Abakan	53.43N	91.26E	5162/340	5801/341	6233/344
Anadyr	64.45N	177.29E	2474/321	3025/328	3487/330
Birobidzhan	48.48N	132.57E	4402/315	4890/318	5357/321
Blagoveshchensk	50.16N	127.32E	4504/319	5021/321	5488/324
Bodaybo	57.51N	114.10E	4470/331	5066/332	5520/335
Chita	52.03N	113.30E	4805/327	5378/329	5838/332
Dudinka	69.15N	86.15E	4232/349	4900/350	5301/352
Iman	45.54N	133.35E	4519/312	4984/315	5450/318
Irkutsk	52.16N	104.20E	5008/332	5610/333	6062/336
Khabarovsk	48.27N	135.06E	4346/313	4823/316	5291/320
Komsomolsk-na-Amure	50.35N	137.02E	4184/314	4669/318	5137/321
Krasnogorsk	48.27N	142.00E	4106/310	4557/314	5023/317
Kyzyl	51.42N	94.27E	5238/338	5867/338	6299/341
Magadan	59.34N	150.48E	3389/318	3910/323	4376/326
Novosibirsk	55.02N	82.55E	5194/345	5852/346	6267/349
Petropavlovsk-Kamchatsky	53.01N	158.39E	3326/308	3766/314	4232/317
Spassk Dalniy	44.37N	132.48E	4608/312	5067/314	5533/317
Svobodnyy	51.24N	128.07E	4430/319	4952/322	5419/325
Ulan-Ude	51.50N	107.37E	4962/330	5553/331	6009/334
Verkhoyansk	67.35N	133.27E	3573/332	4179/335	4628/337
Vladivostok	43.08N	131.54E	4712/311	5165/313	5631/317
Yakutsk	62.13N	129.49E	3879/328	4461/331	4918/333
Yeniseysk	58.25N	92.00E	4855/342	5501/343	5928/345
Yerofey Pavlovich	54.00N	122.00E	4477/324	5033/326	5496/329
Yuzhno-Sakhalinsk	46.58N	142.42E	4145/308	4581/312	5047/315