

## Omega - End of an Epoch



Omega Visit with Gail West, Sept. 23, 1993

### And information on the Russian ALPHA System

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Omega shut down! Here's a copy of my report e-mailed to a few other people and also a spectrogram made of the tape:

Well, I got a nice recording of Omega's last beeps 30 Sept. 1997 at 0300z, and also two nights of nice whistlers too, especially this morning, 01 October 1997, between 1100-1330 UT. There was also some intermittent dawn chorus starting at about 1230 UT and going until after 1500 UT - I had not yet caught chorus this summer or fall until now, so I was really glad to hear some chorus even though it was not very strong, and overall a really nice 2 days of whistler listening. Many whistlers this morning (October 01) had echoes too. The whistlers seemed to be generated by fairly nearby lightning - not too local but within 1000 miles.

I have found that indeed (and this is shown in a more recent book on magnetospheric physics), whistlers don't follow exact paths and conjugate points AT ALL(!!!). Often, loud whistlers at any locale may be generated by lightning somewhat far away (1000-2000 miles perhaps) while more closeby lightning is NOT generating the loudest whistlers (which may be loud 1000 miles away somewhere ELSE!) Listening since mid-august has given me quite a bit of observation in this regard and countless examples on tape. I mentioned this somewhat subjectively in my VLF STORY I wrote a few years back and I'm even more sure of this. As such, Mexican or Montanan lightning may make LOUD California whistlers,





Visit 23 Sept. 1993 pictures

Notice that there is a weak short-beep station transmitting - that is Russian ALPHA (an interesting name to accompany Omega, eh?). Here is new information (included herein as of 13 Dec. 1997):

## Russian ALPHA Radio Navigation System

**Stations:**

- 1) **KO** - Komosomolskamur (north of Khabarovsk), 50N/137E
- 2) **NO** - Novosibirsk (master station, Central Russia), 54N/83E
- 3) **KR** - Krasnodar (Black Sea), 45N/38E

**Time Schedule:** Cycle period 3.6 seconds, 6 time slots at 0.4 sec. duration, 0.2 sec. spacing

Estimated radiated power in wattage 50 kW to 100 kW

NO

### Russian ALPHA Radio Navigation Format

Frequency (kHz)	time slot 1	time slot 2	time slot 3	time slot 4	time slot 5	time slot 6
11.905	KR	KO	NO	NO	--	
12.649	KO	KR	--	--	--	NO
14.881	NO	NO	--	--	KR	KO

**Sources:**

Beukers Laboratories, Inc.: *VLF and LF for Navigation*, Summer 1974, Vol. 21, No. 2

Kerckhoff, Manfred; Bremen, Germany - narrow-band and wide-band receiving observations (Manfred also supplied the article above)

McGreevy, Stephen P.; Lone Pine, California - In-field observations with wide-band receivers

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Written in Dec. 1997; reposted 11 April 2007

Visits since 11 April 2007: 