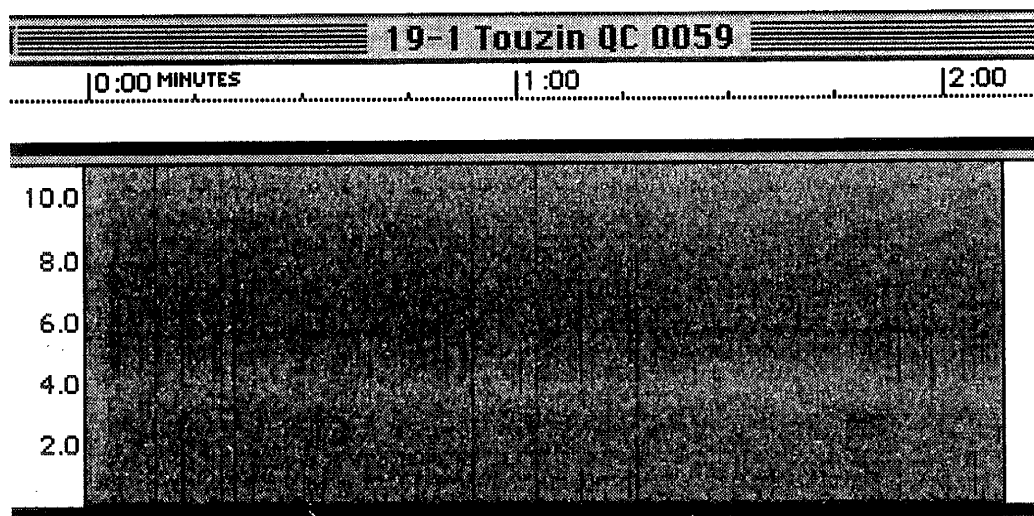


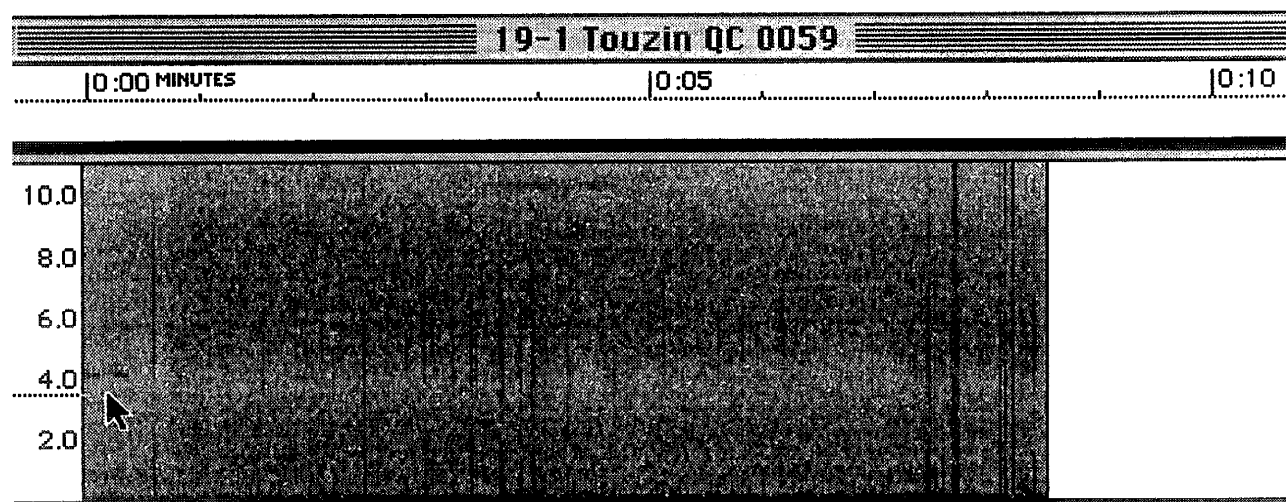
INTMINS Data

The following spectrograms are taken from data tapes submitted by INSPIRE observers. The first view shown will be that of the entire two-minute interval analyzed. At the top of the image is the sound filename which consists of the operation number, the name of the observer, the state or country where the observations were made and the start time of the operation. Subsequent views will be of portions of the first. Use the time scale at the top to determine the length of the view. Unless otherwise noted, the start time of the cropped view is the same as the start time of the operation.

19-1

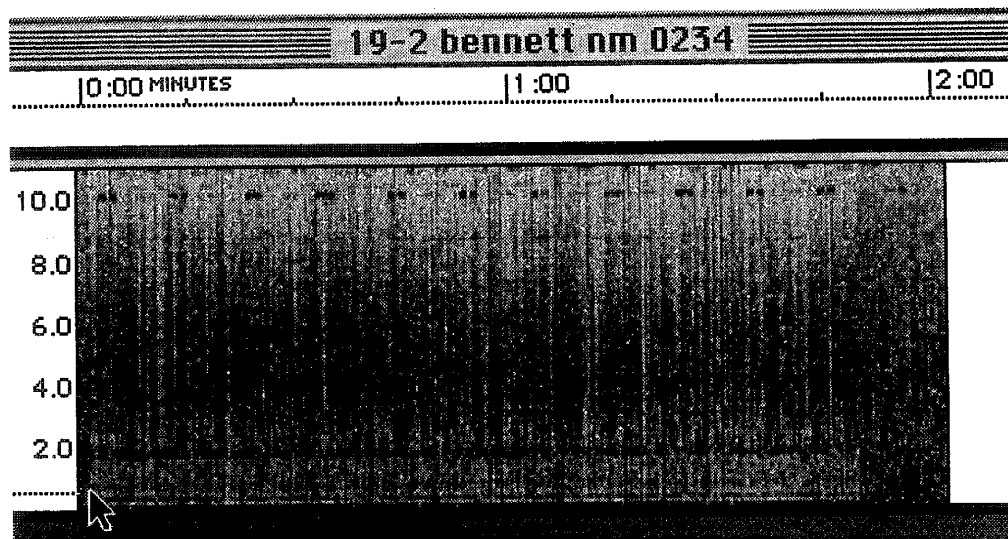


Jean-Claude Touzin, St. Vital, Quebec, Canada. Fairly quiet conditions with some strong sferics and OMEGA present.

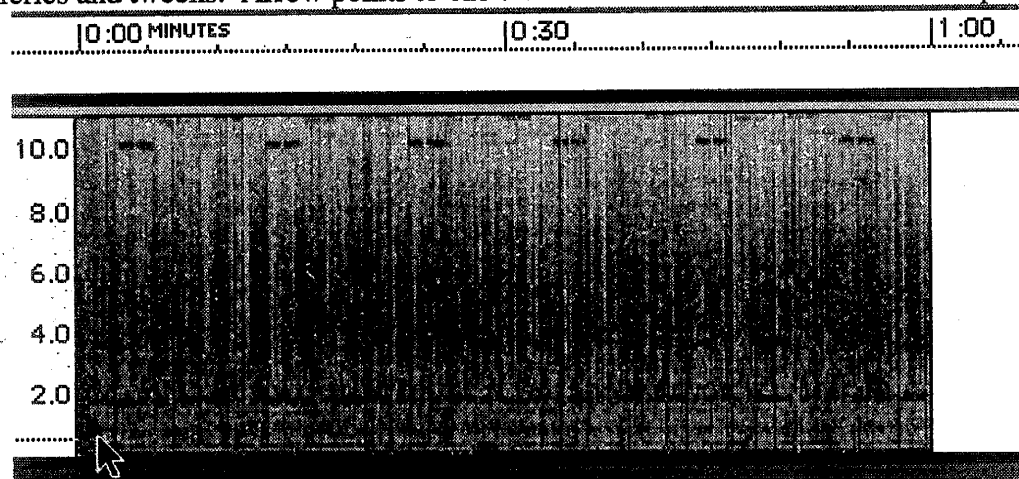


A ten second interval of the file. The arrow points to the double beep used as a time mark at 0059. Note the OMEGA dash at 0:04 seconds.

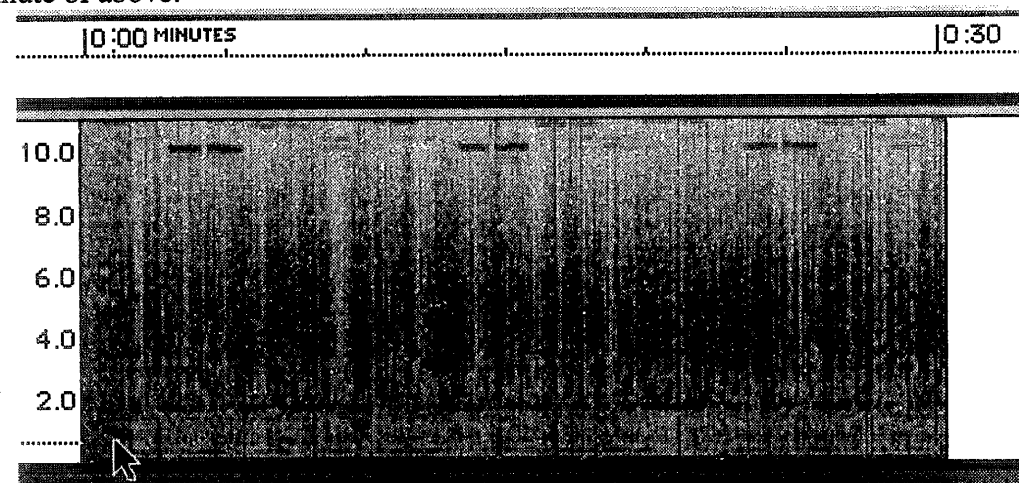
19-2



Robert Bennett, Las Cruces, New Mexico
Dense sferics and tweaks. Arrow points to 0234 WWV tone. Four OMEGA stations present.

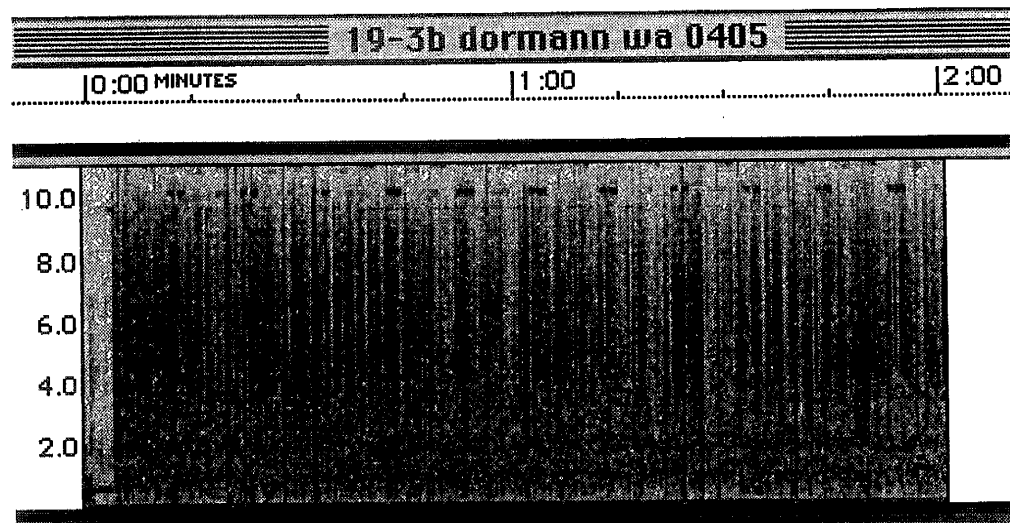


First minute of above.

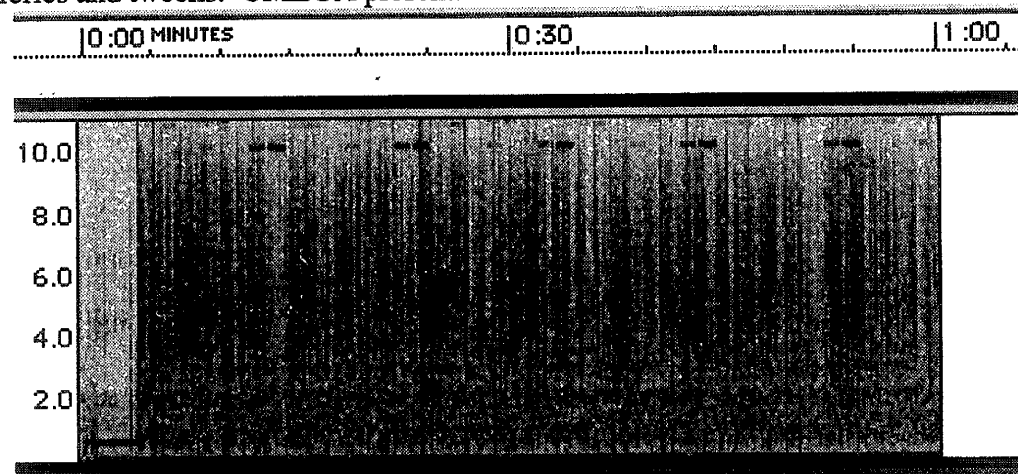


First 30 seconds. Four OMEGA stations present. Many tweaks as evidenced by the band of hooks at about 2 kHz.

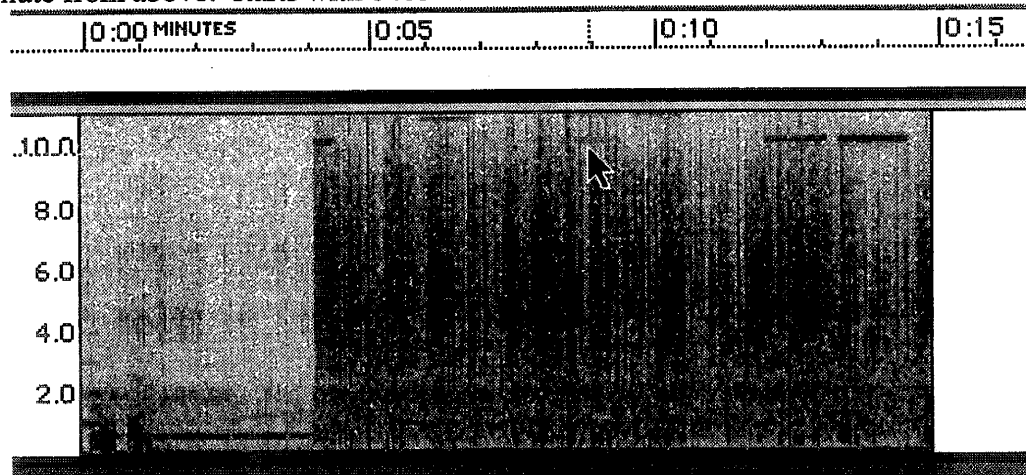
19-3



Mike Dormann and John Currie, Seattle, Washington
Dense sferics and tweeks. OMEGA present.

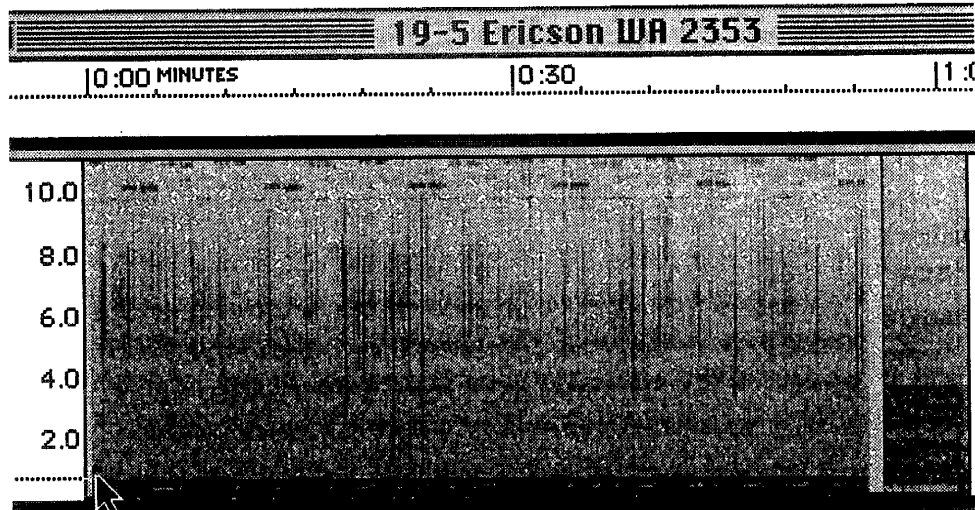


First minute from above. starts with 0405 WWV tone.

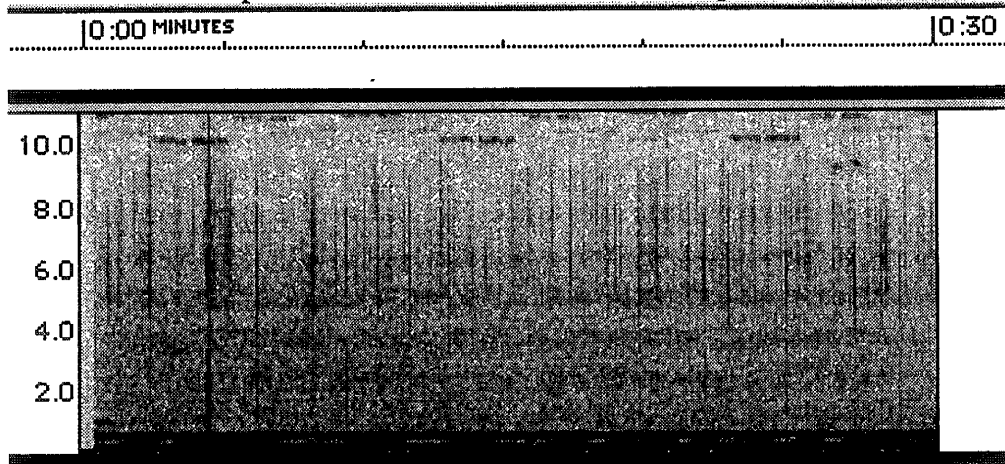


First 15 seconds. Arrow indicates third OMEGA station.

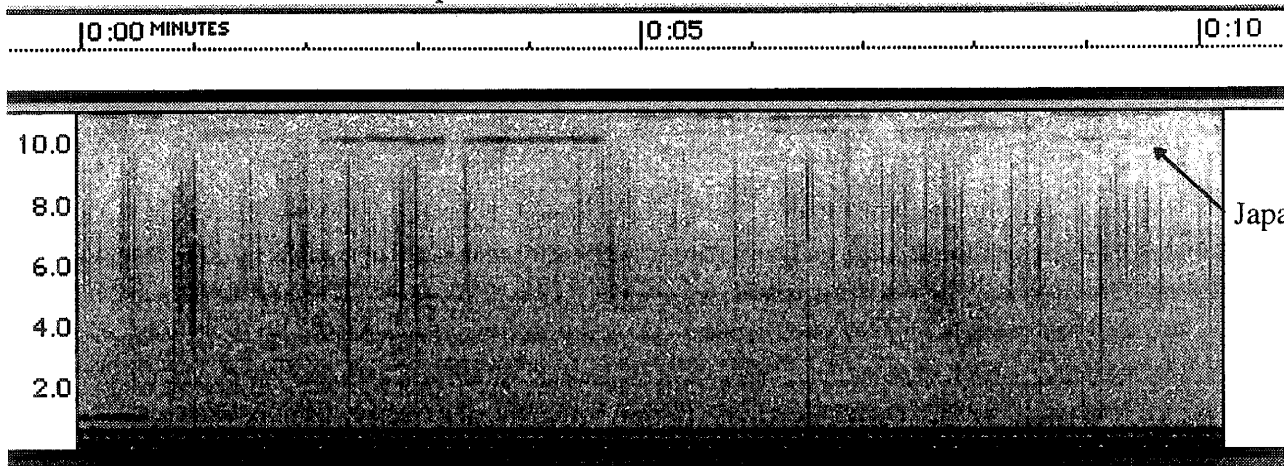
19-5



Jim Ericson, Glacier, Washington
First minute of file. Arrow points to 2353 WWV tone. OMEGA present, sferics.

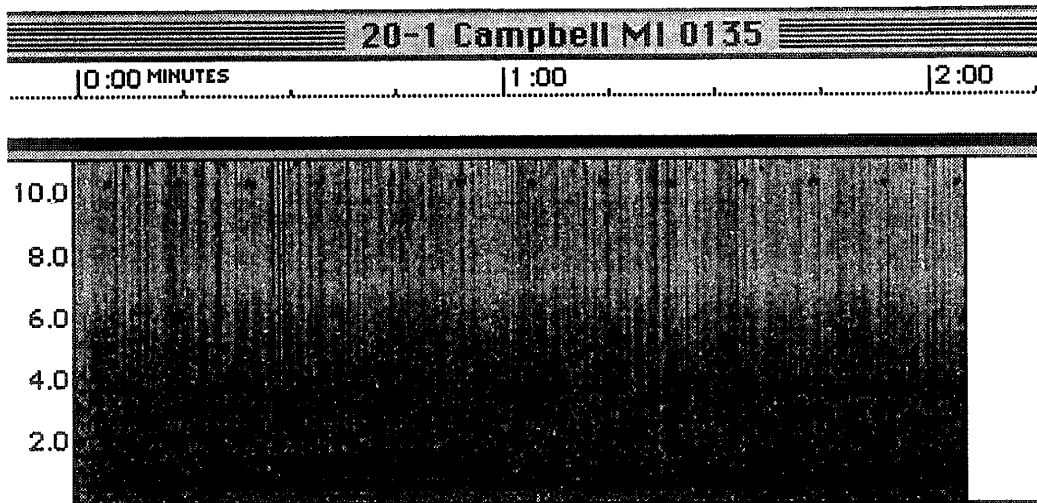


First 30 seconds. Some AC hum present below 1 kHz.

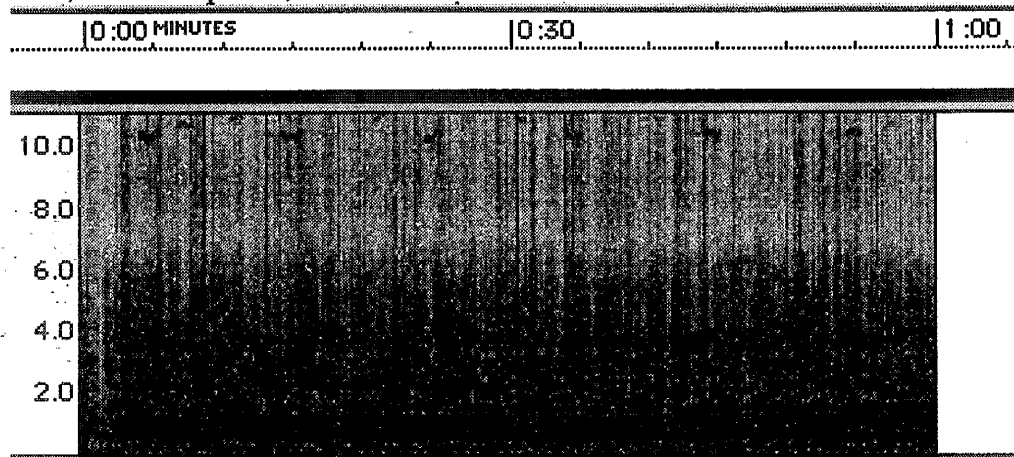


First 10 seconds. Two strong OMEGA stations present: HI followed by ND. Japan OMEGA station shows up at :09 seconds.

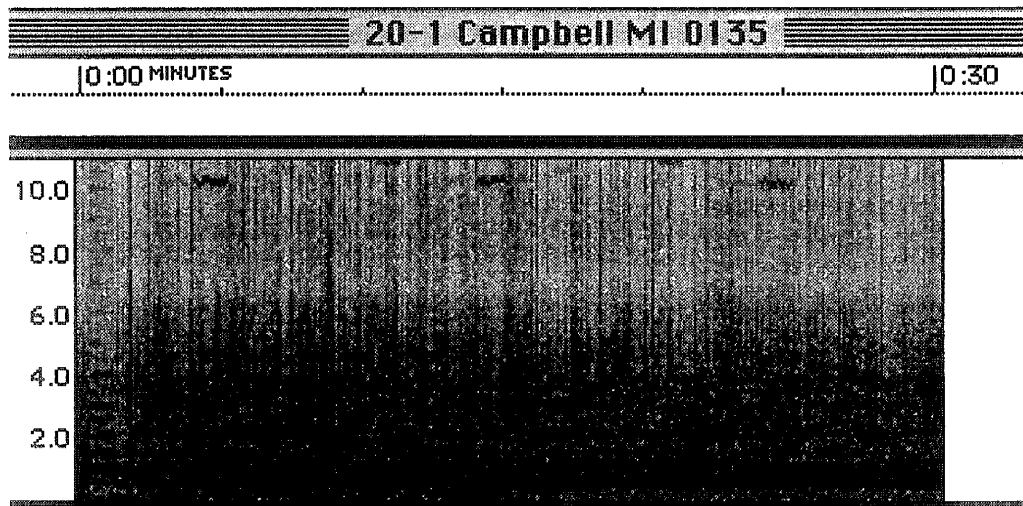
20-1



Rick Campbell, Brighton, MI
Dense sferics, OMEGA present, some AC hum.

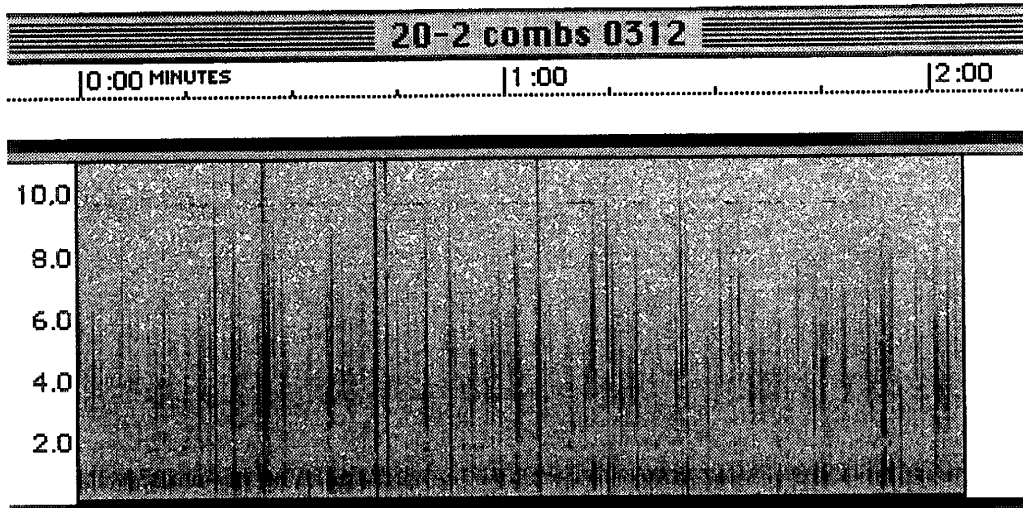


First minute. WWV tone is at the start of file.

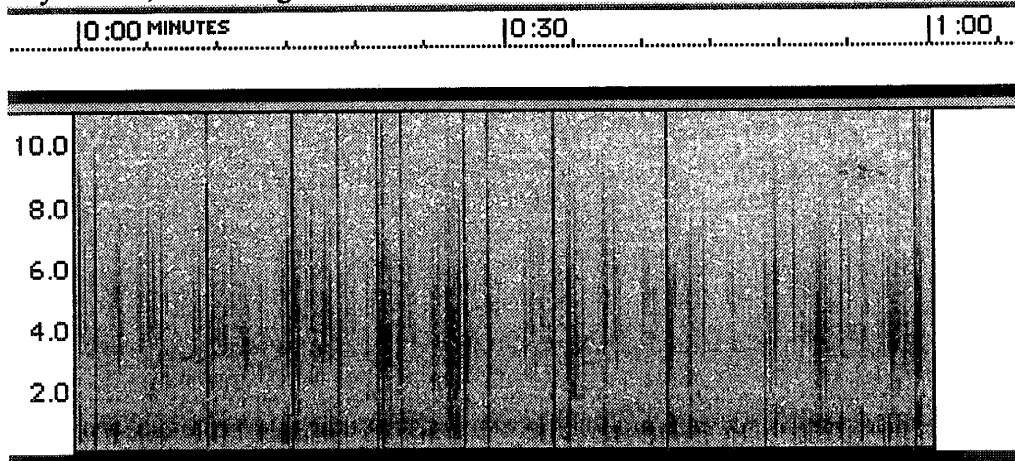


First 30 seconds.

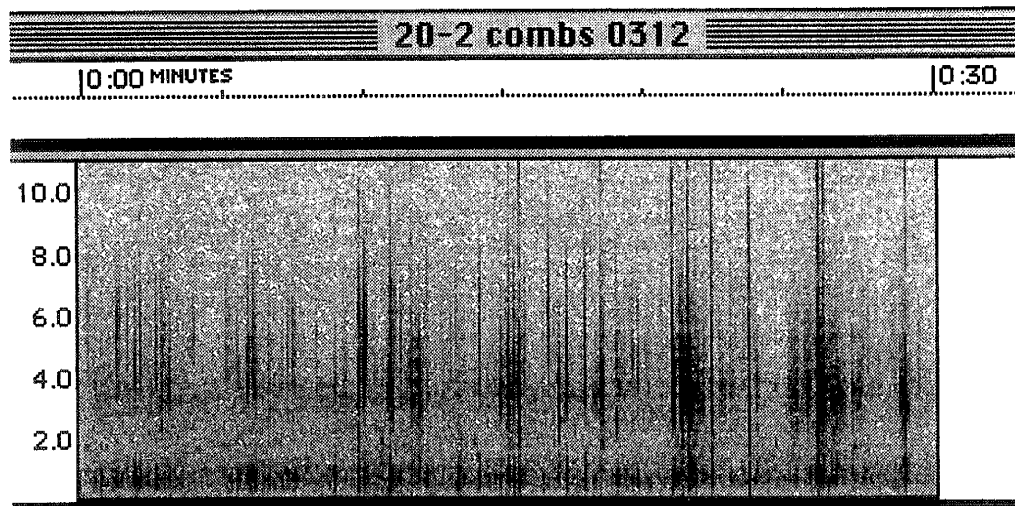
20-2



Bill Combs, Crawfordsville High School, Crawfordsville, Indiana
Low density sferics, but strong.

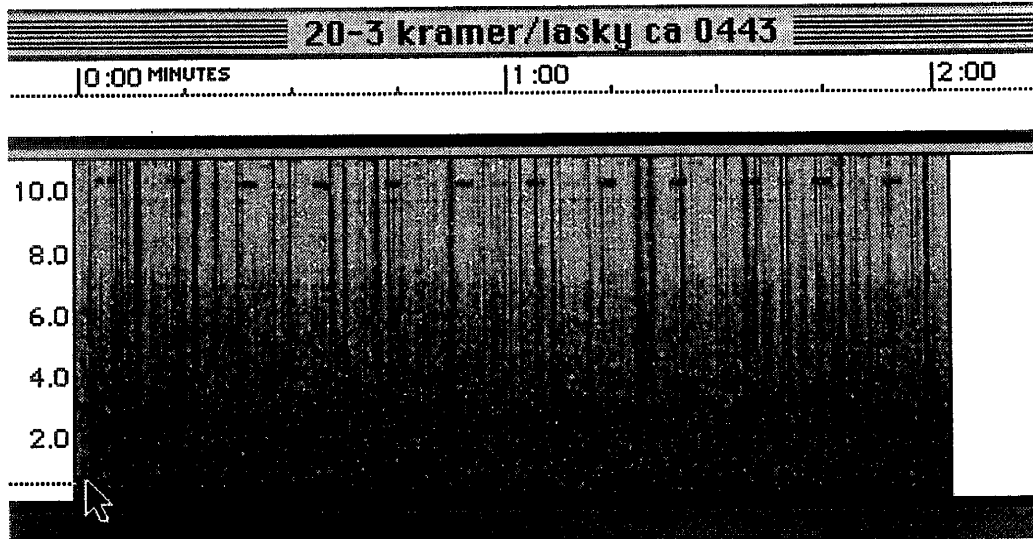


First minute.

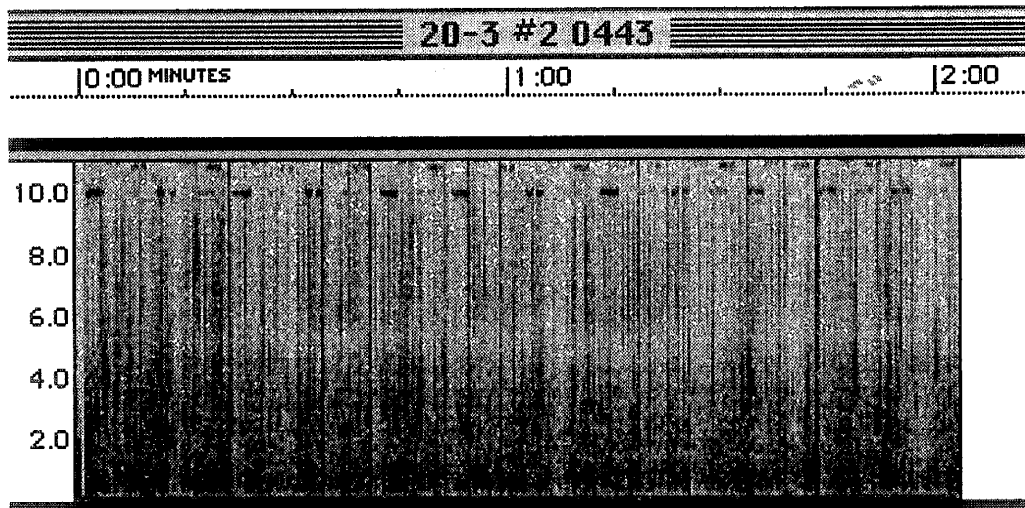


First 30 seconds. Note the burst of sferics just past 25 seconds.

20-3

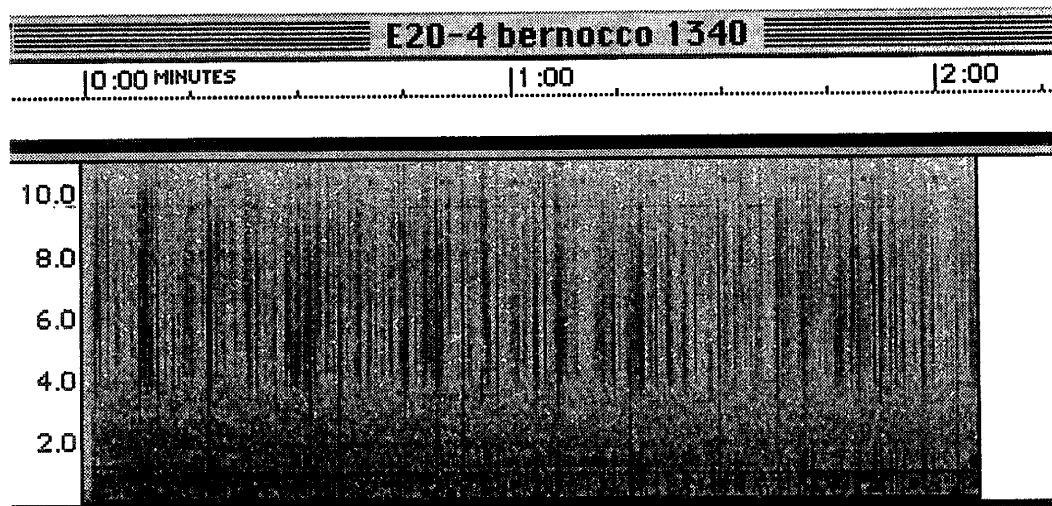


Clifton Lasky and Larry Kramer, Fresno, California
Dense sferics and tweeks, strong OMEGA, arrow points to 0443 WWV tone.



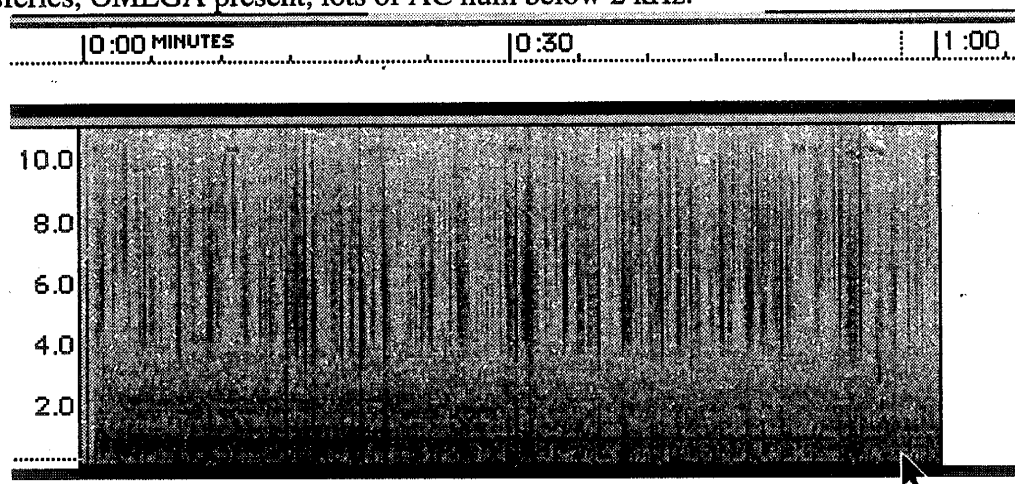
Bill Pine, Chaffey High School, Ontario, California
This data gathered about 250 miles south of the Fresno team.

E20-4

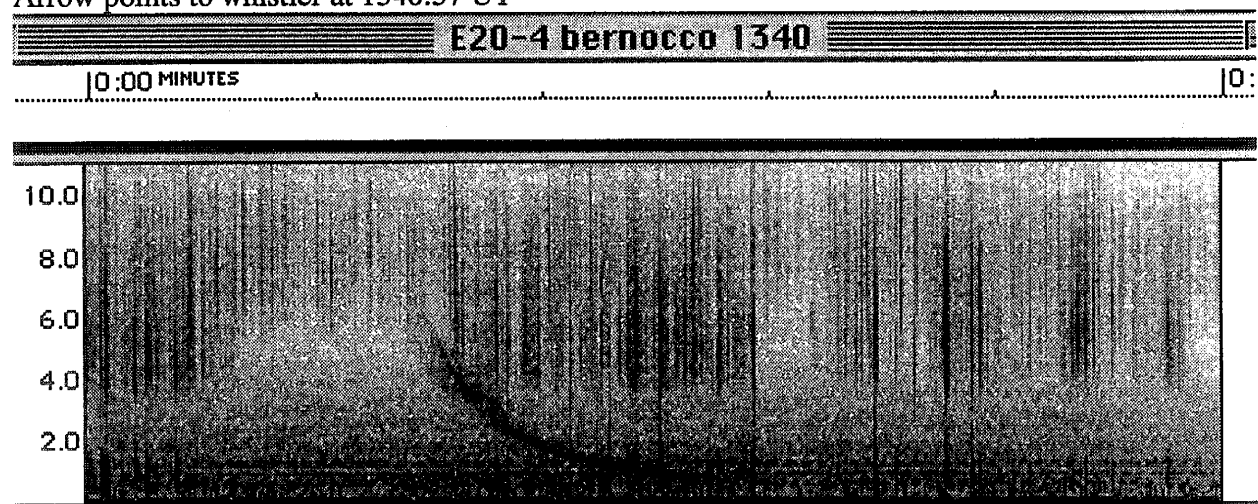


Silvio Bernocco, Torino, Italy

Strong sferics, OMEGA present, lots of AC hum below 2 kHz.

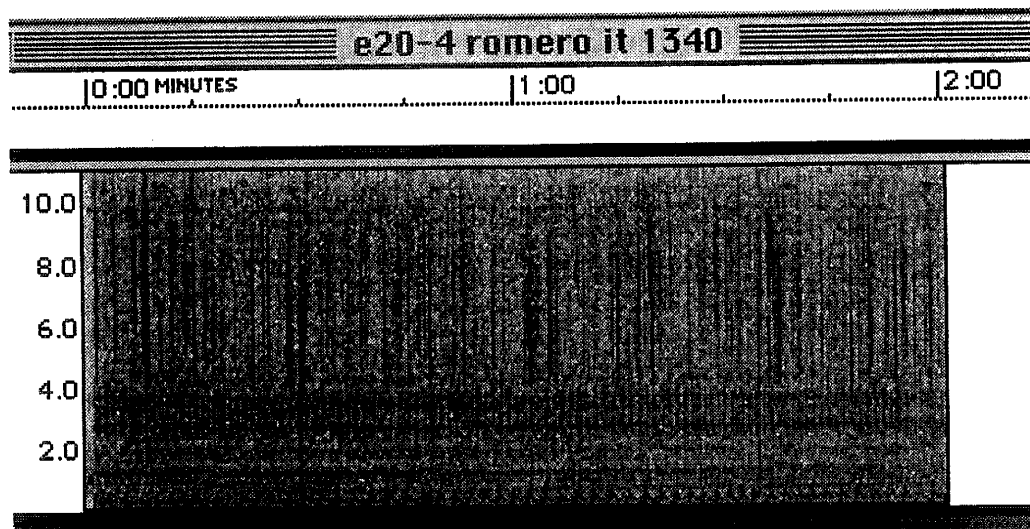


Arrow points to whistler at 1340:57 UT

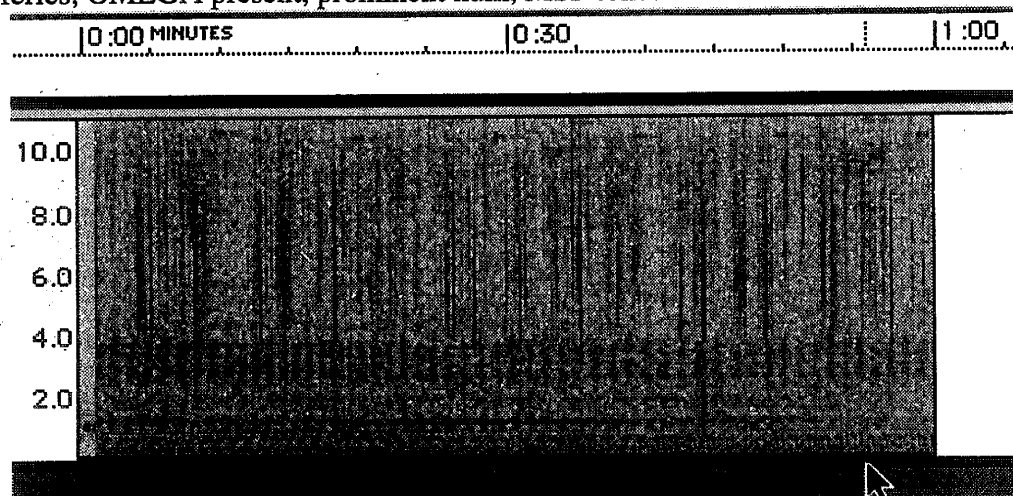


Closeup of the above whistler. Notice the long ramp below 2 kHz.

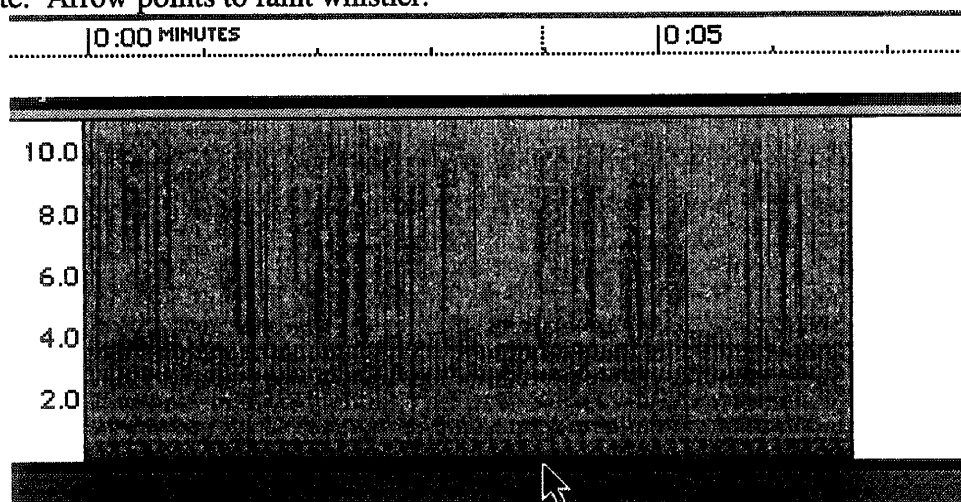
E20-5



Renato Romero, Cumiana, Italy
Strong sferics, OMEGA present, prominent hum, MSF tones for time mark at start.



First minute. Arrow points to faint whistler.

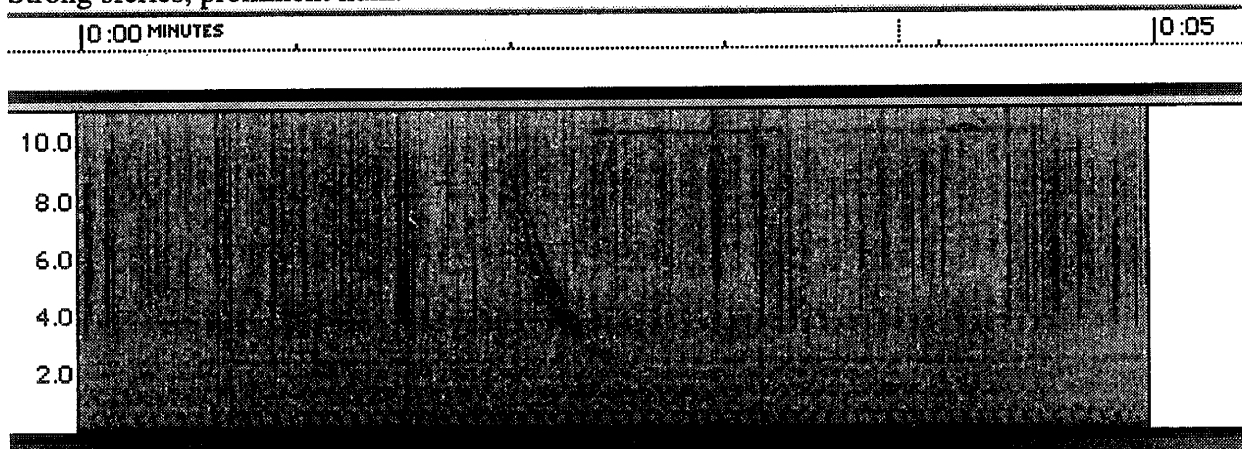


Closeup of whistler, but I can't see it.

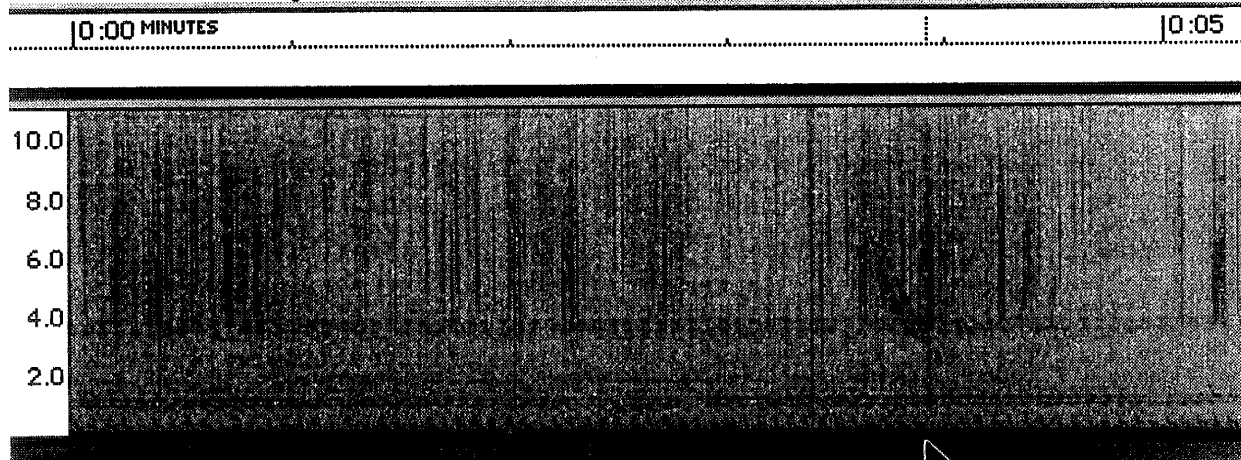
E20-6



Renato Romero, Cumiana, Italy
Strong sferics, prominent hum.

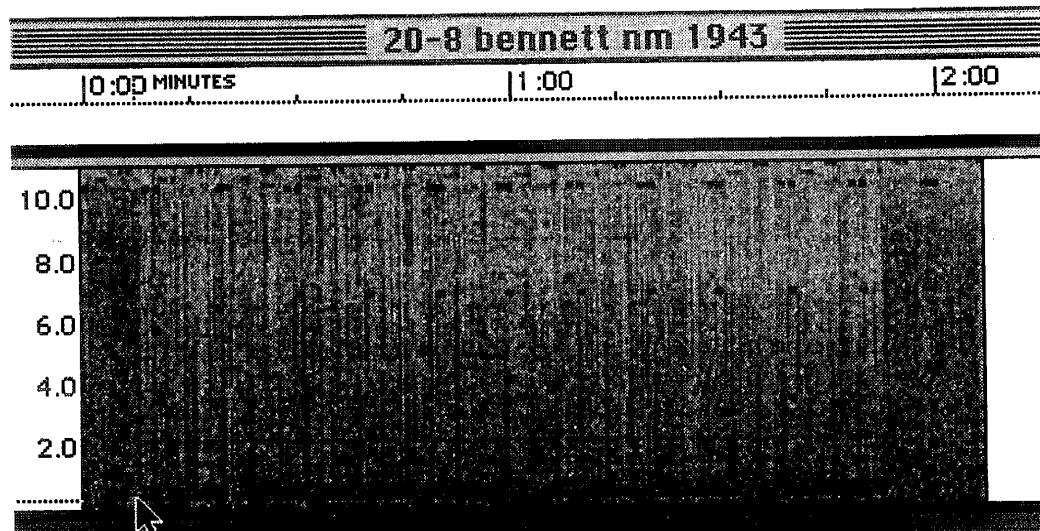


Whistler that occurred just after the start of the tape (before the operation).

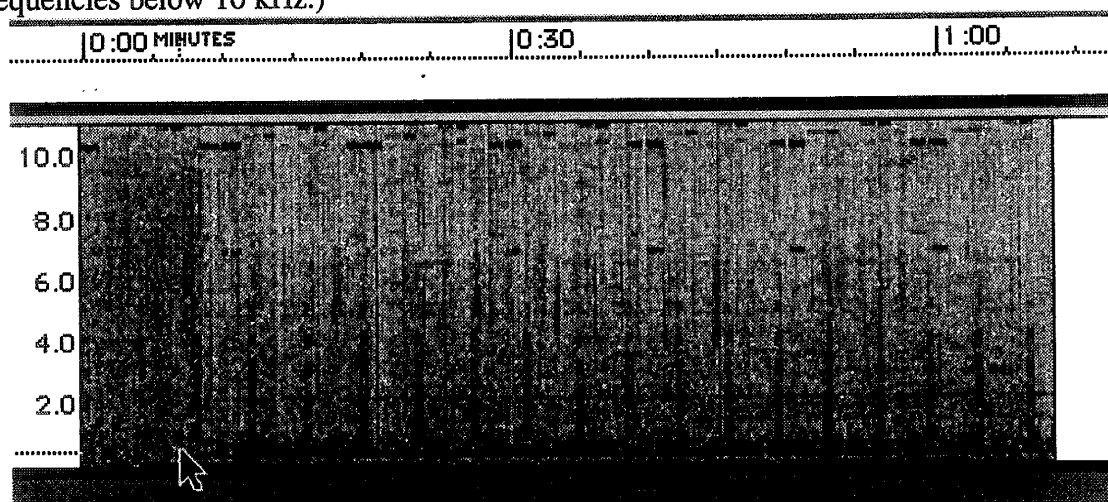


Another whistler a few seconds after the first.

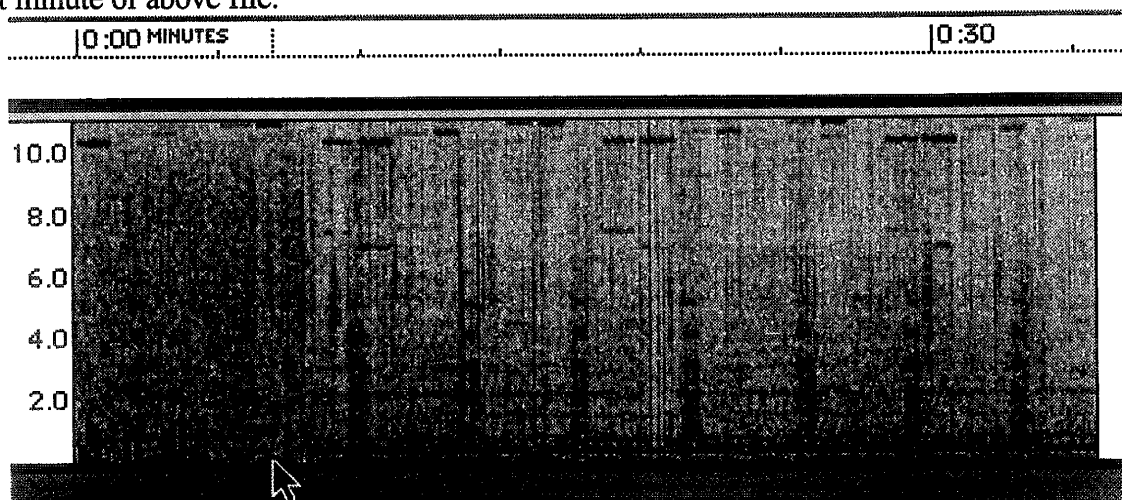
20-8



Robert Bennett, Las Cruces, New Mexico
 Arrow points to 1943 WWV tone; sferics, LORAN and OMEGA (note aliasing of OMEGA dashes at frequencies below 10 kHz.)

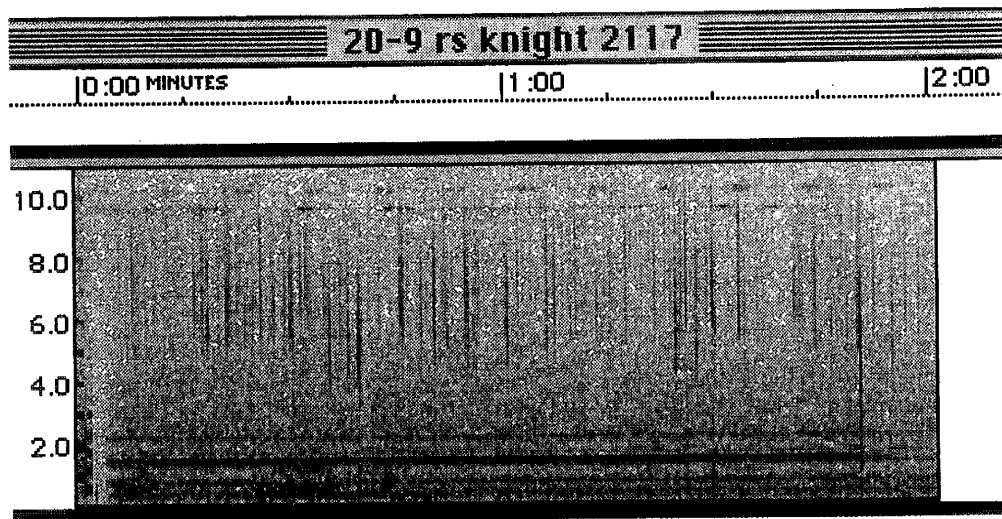


First minute of above file.

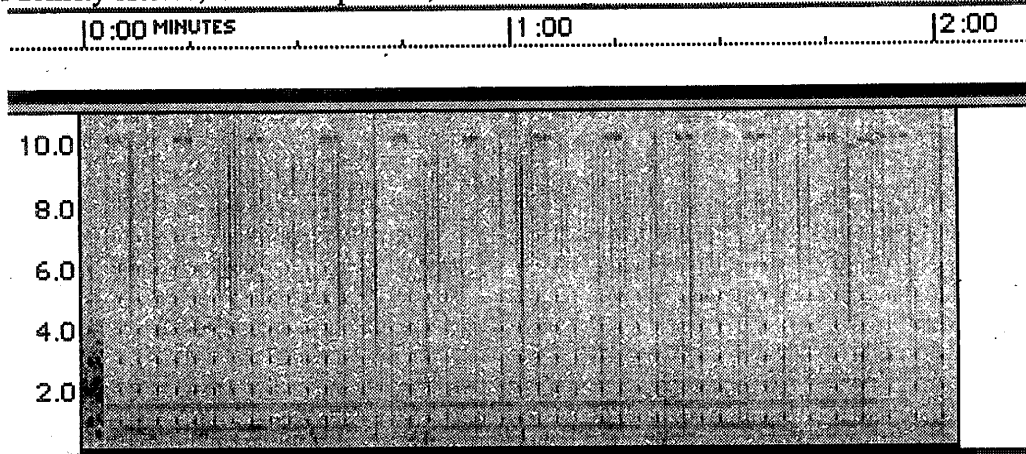


First 30 seconds. Arrow is WWV tone, OMEGA plus aliasing and LORAN are evident.

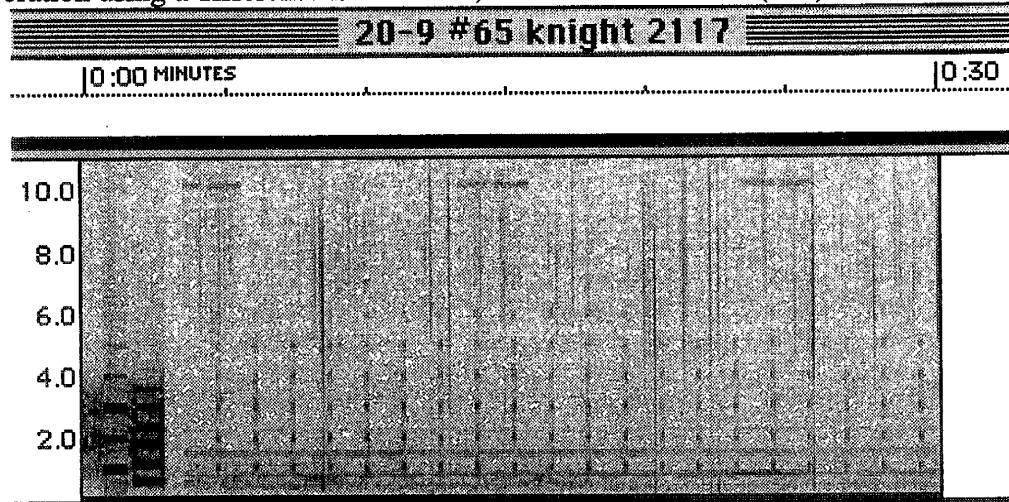
20-9



Dean Knight, Sonoma Valley High School, Sonoma, California
Medium density sferics, OMEGA present, some AC hum and wind noise,

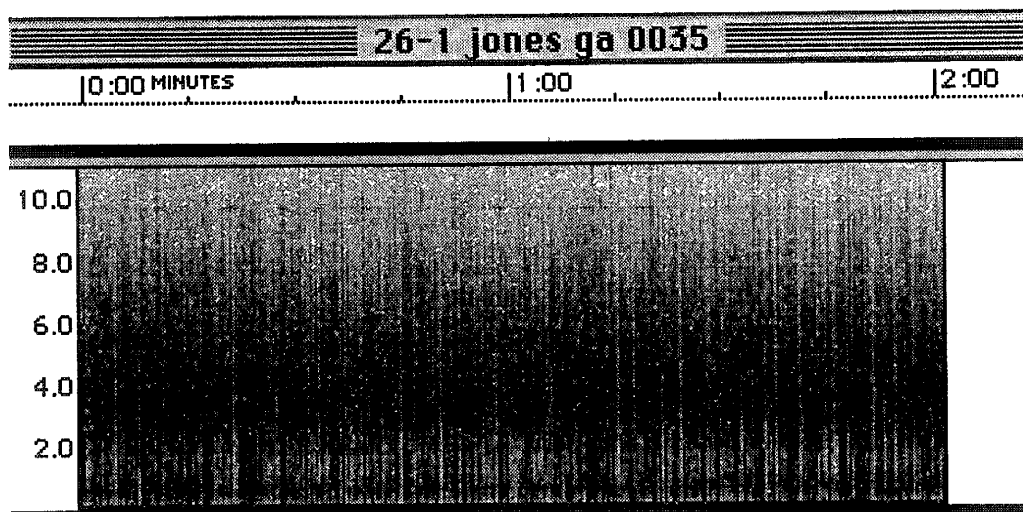


Same operation using a different RS4 receiver, recorder and antenna (#65).

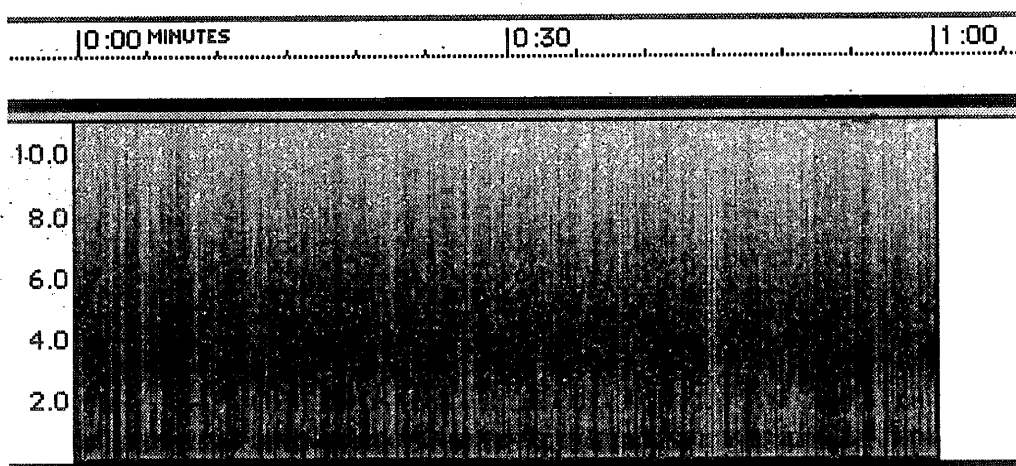


First 30 seconds from receiver setup #65 above. LORAN present on this one.

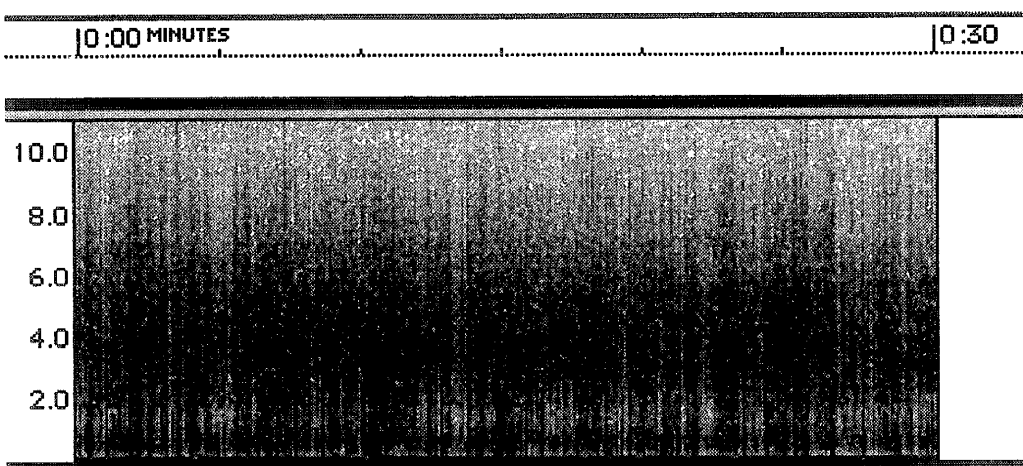
26-1



David Jones, Columbus, Georgia
Very dense, strong sferics due to nearby thunderstorm activity.

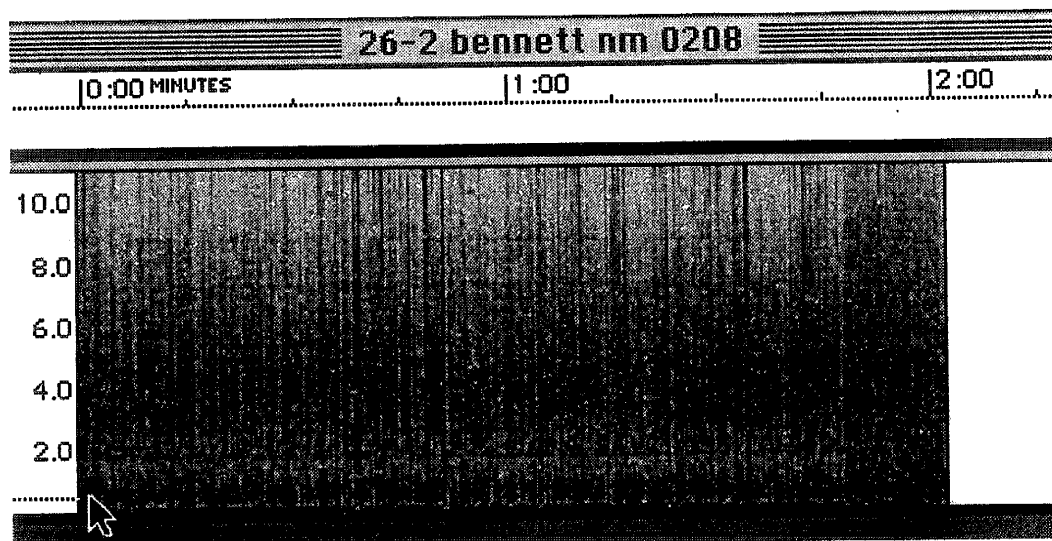


.First minute from above.



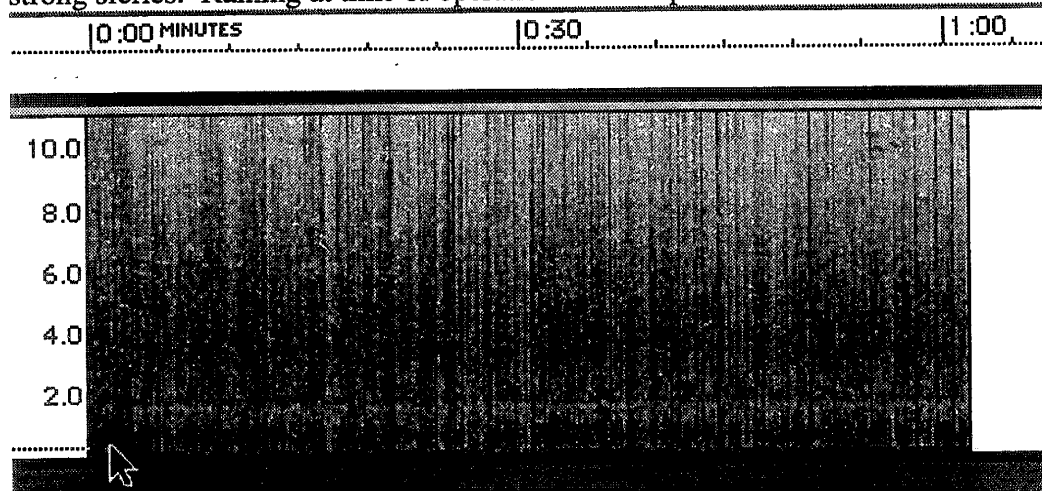
First 30 seconds of the file.

26-2

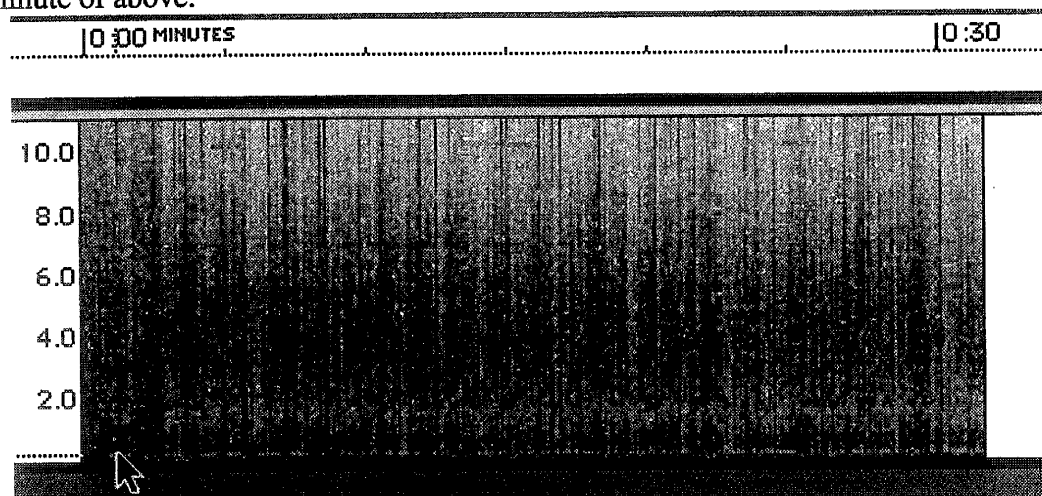


Robert Bennett, Las Cruces, New Mexico

Dense, strong sferics. Raining at time of operation. Arrow points to 0208 WWV tone.

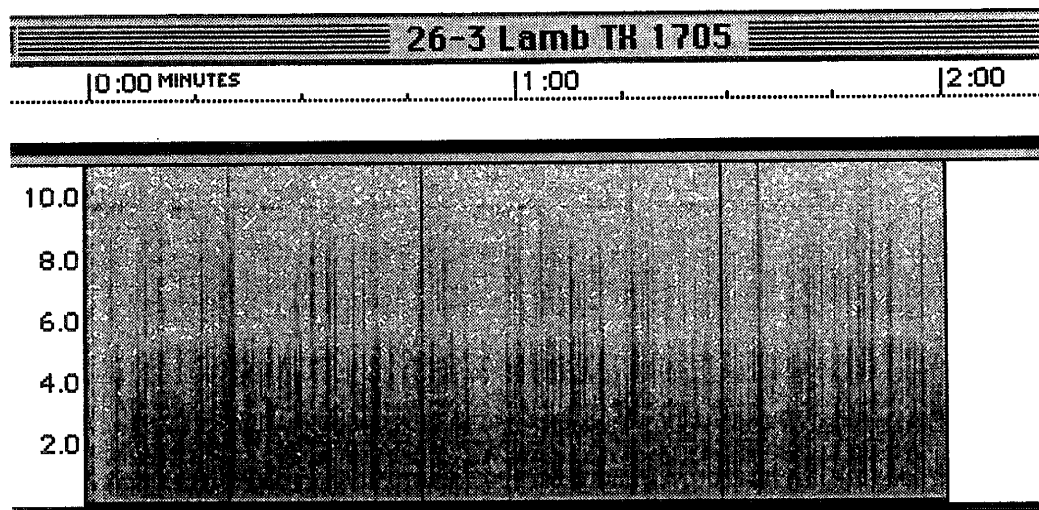


First minute of above.

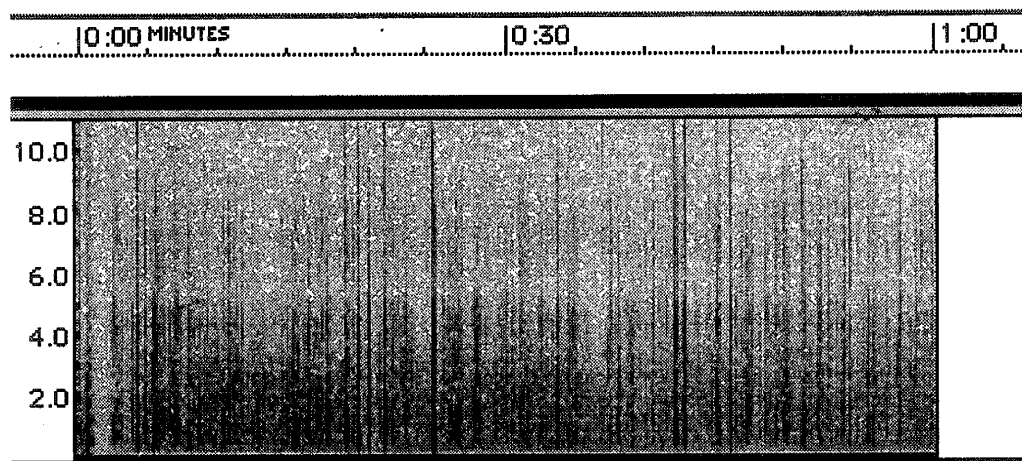


First 30 seconds.

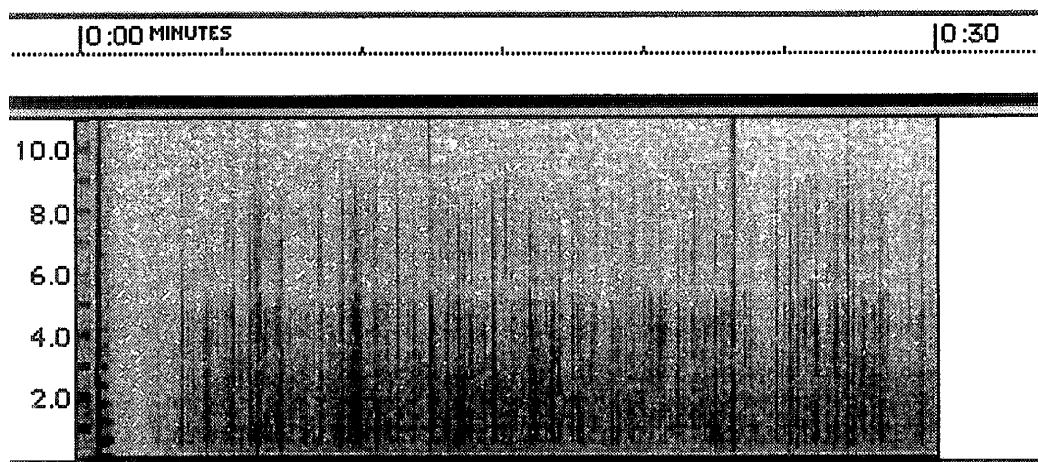
26-3



Jack Lamb, Belton, Texas
Dense sferics; file starts with the 1705 WWV tone.



First minute of operation.



First 30 seconds. Note the absence of AC hum.