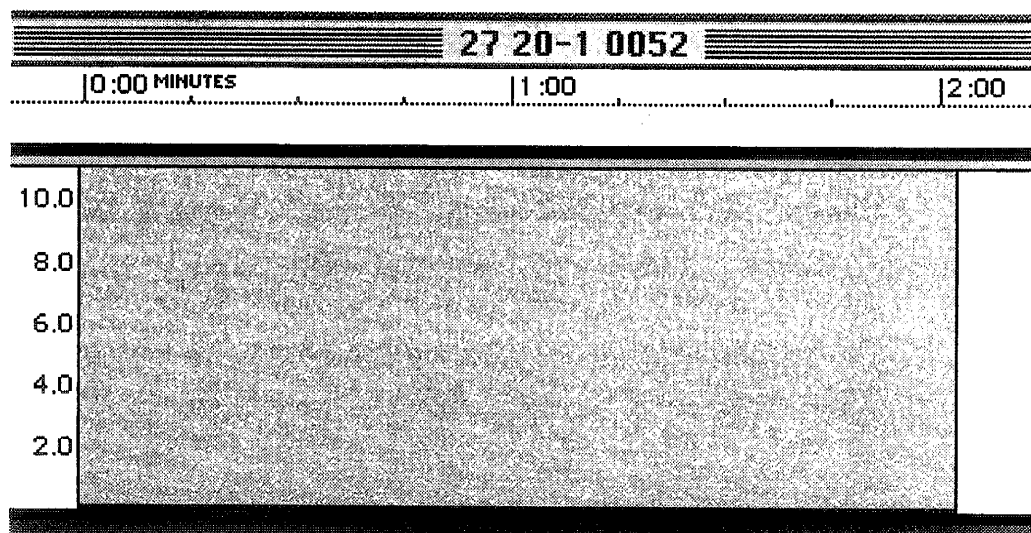
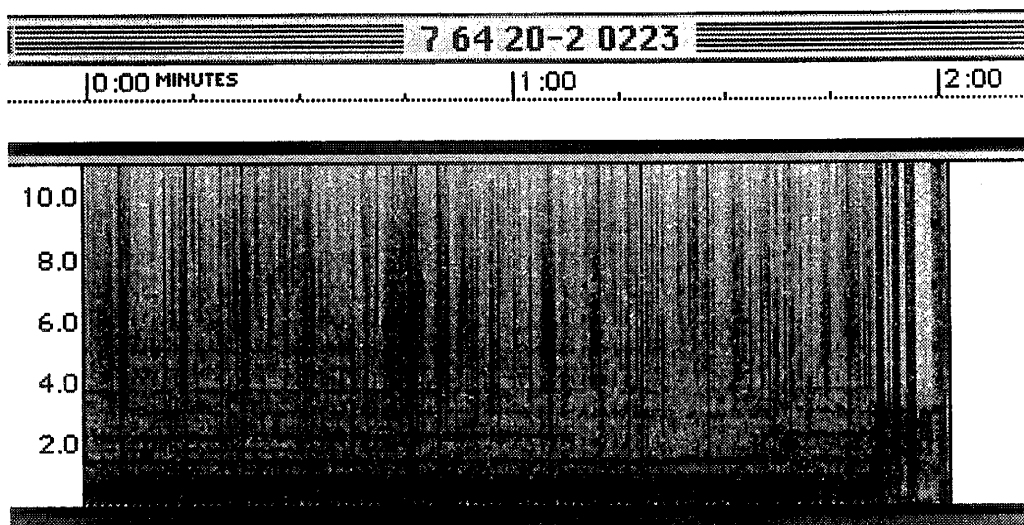


Team 27 "Amigos", Ron Janetzke and Mike Miller, San Antonio, Texas. Ron and Mike put data on one track (the top one) and WWV continuously on the other track. The problem with doing this is that if the recorder has Automatic Gain Control (AGC), the strong signal on the WWV track will cause the gain on both tracks to be reduced. Examination of the data track indicates almost no signal. This could be due to the action of the AGC although I doubt it since the level of the WWV signal was well-adjusted to a reasonably low level. Another possibility could be a problem with the receiver or the data track connection to the recorder. A third possibility is that it was just an extremely quiet time for natural radio in central Texas. Since Ron and Mike were successful in obtaining good quality data on other observations during April, I think that this is the most probable explanation.

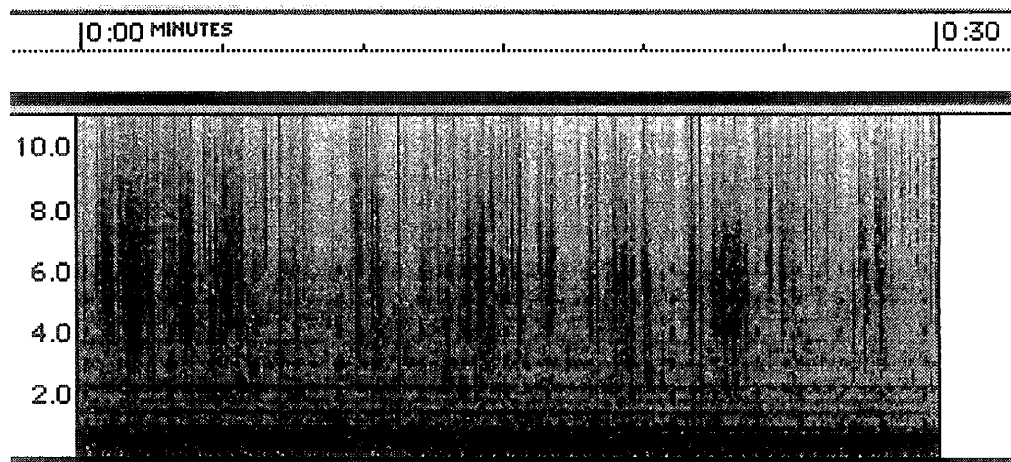
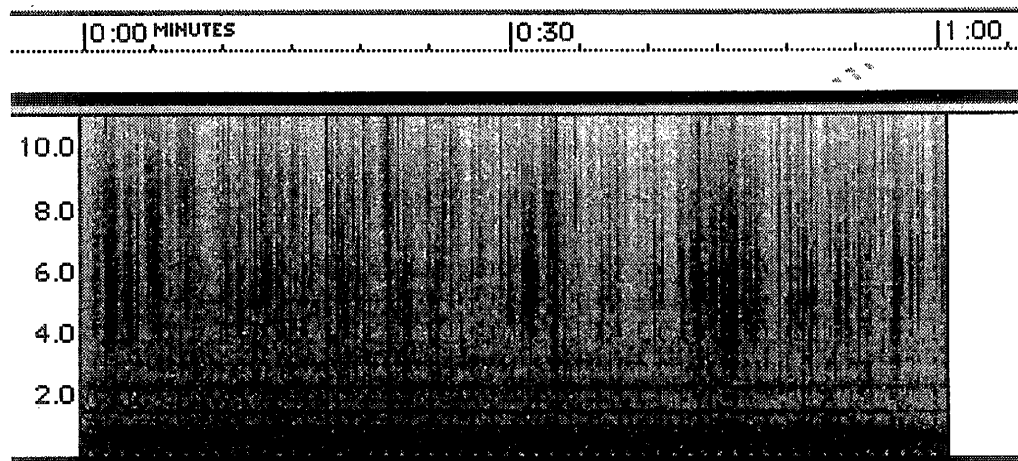


Data track.

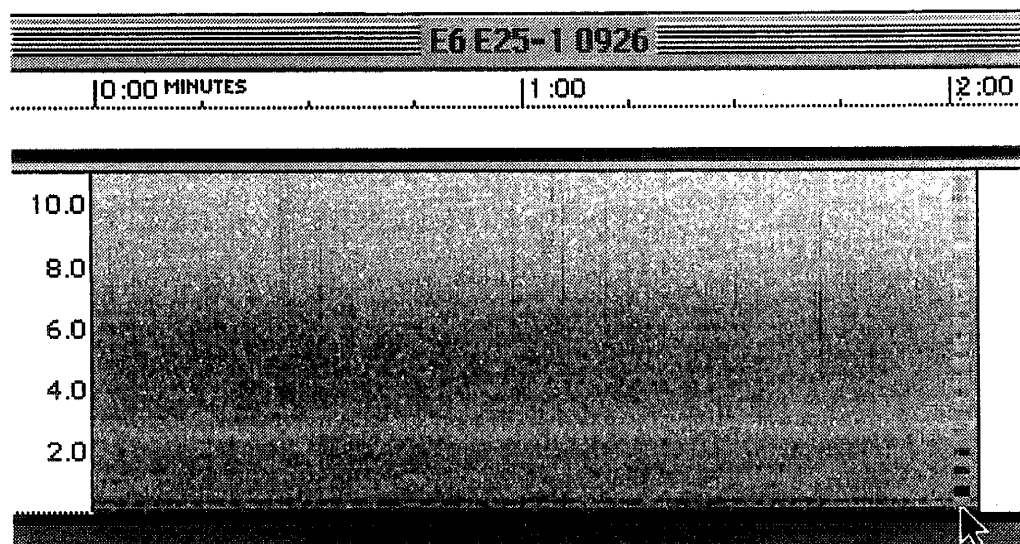
20-2



Team 7 Dean Knight, Sonoma Valley High School, Sonoma, California. Dense sferics, typical of evening. LORAN present and some hum. Dean uses a long wire antenna with this receiver which increases the 60 Hz hum level at his site but greatly increases the sensitivity to natural radio.

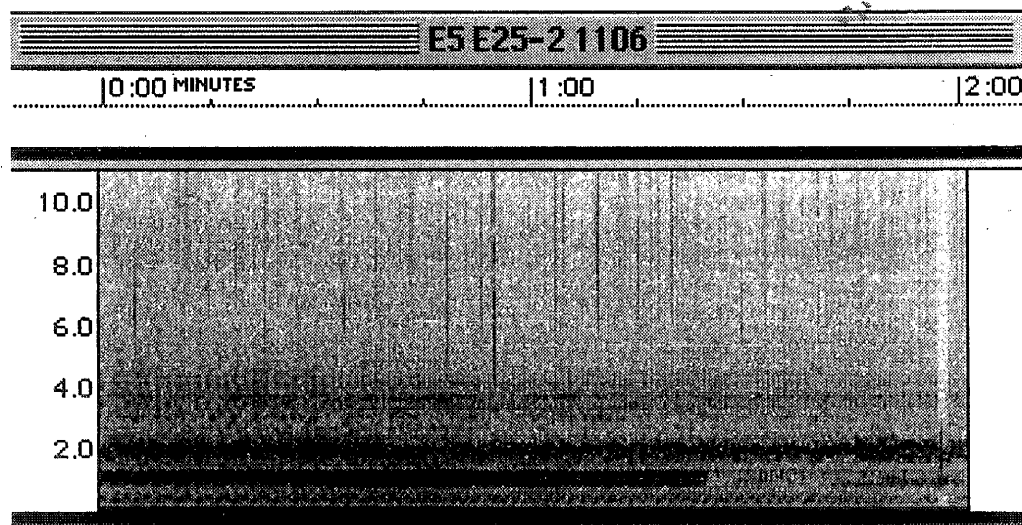


E 25-1



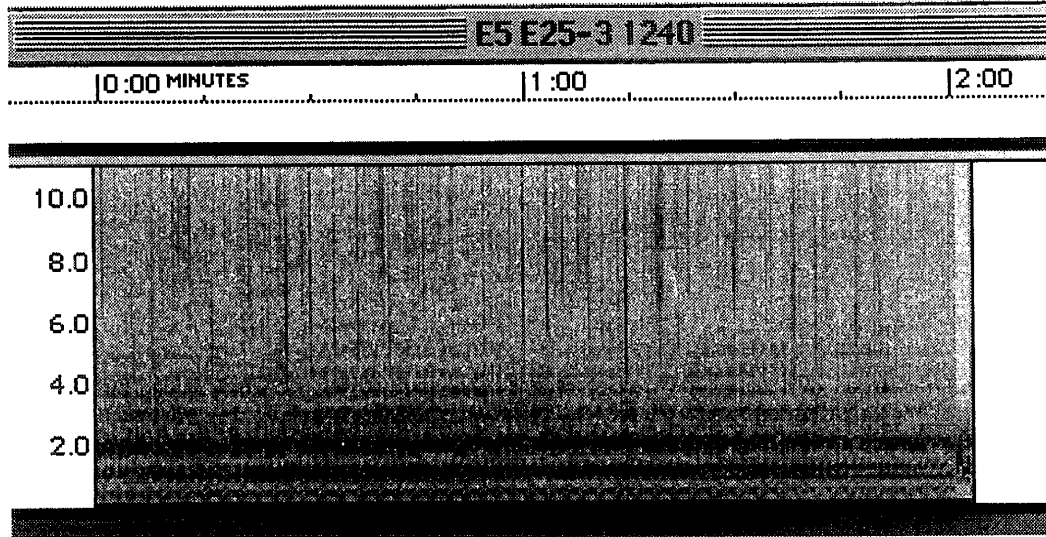
Team E6 Marco Ibridi, Finale Emilia, ITALY Arrow points to 0926 UT time tone. Low hum level, but also almost no sferics recorded.

E25-2

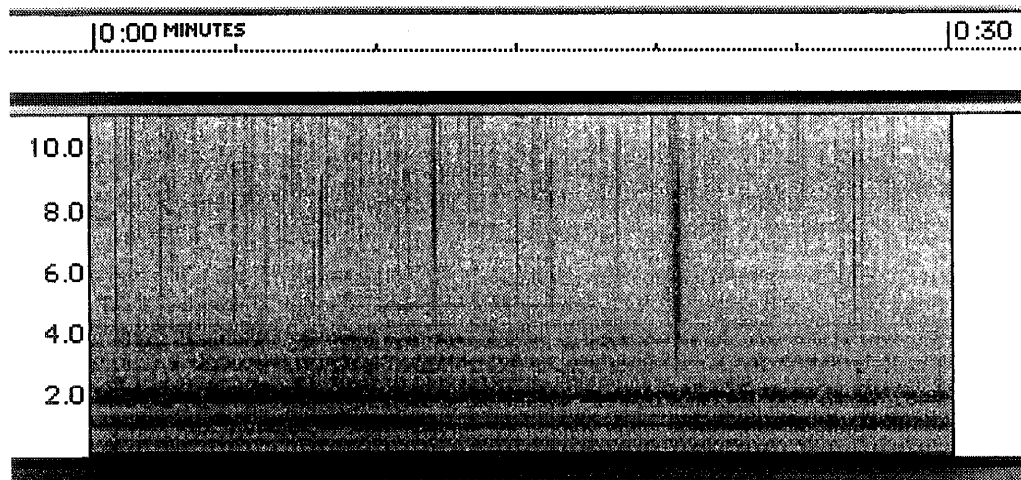
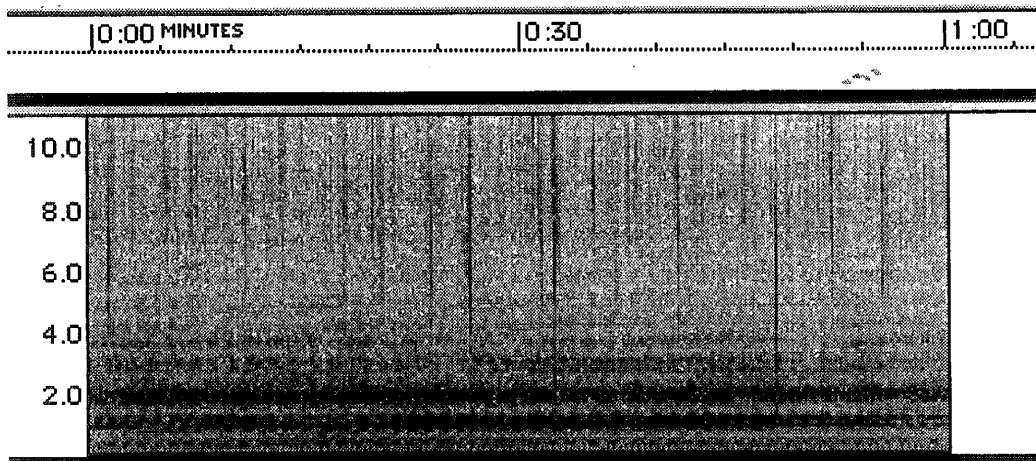


Team E6 Renato Romero, Cumiana, ITALY. Good sferics, but strong hum interferes with frequencies below 2 kHz.

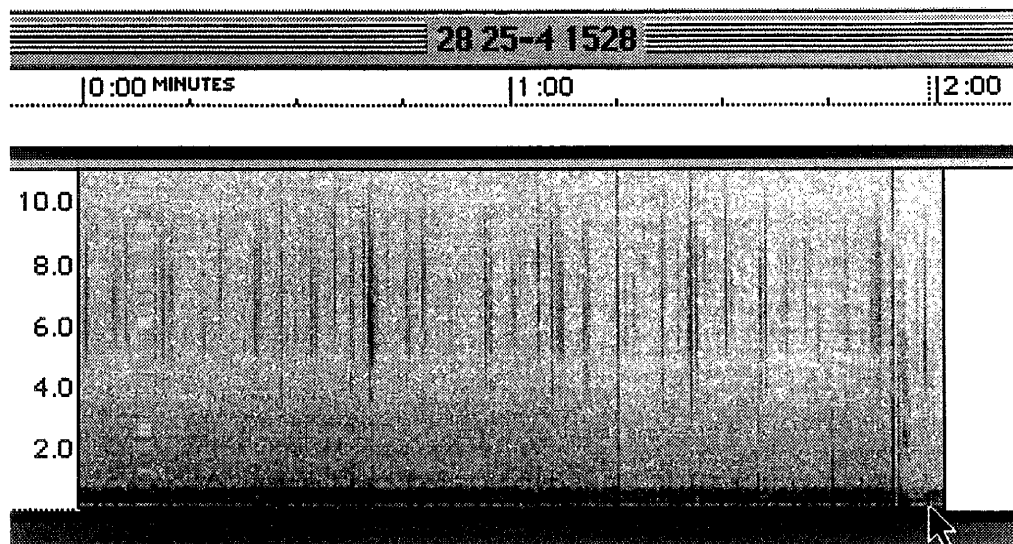
E25-3



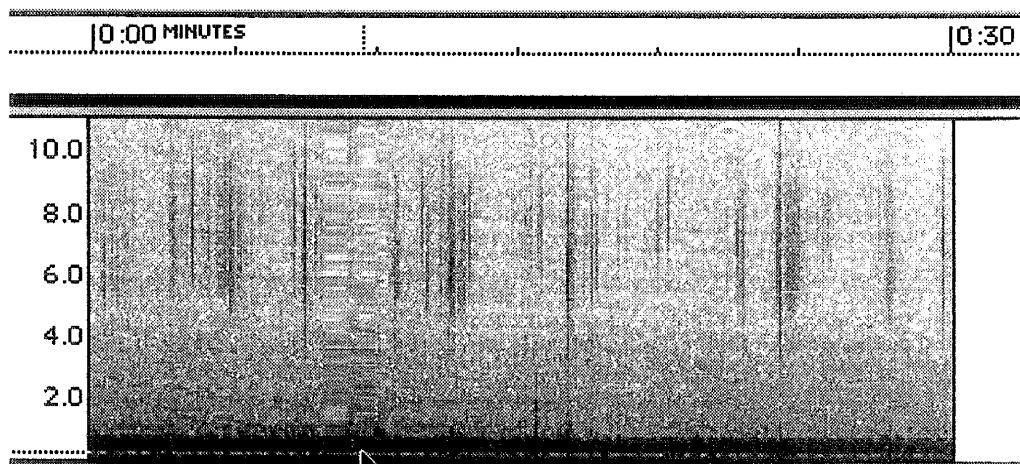
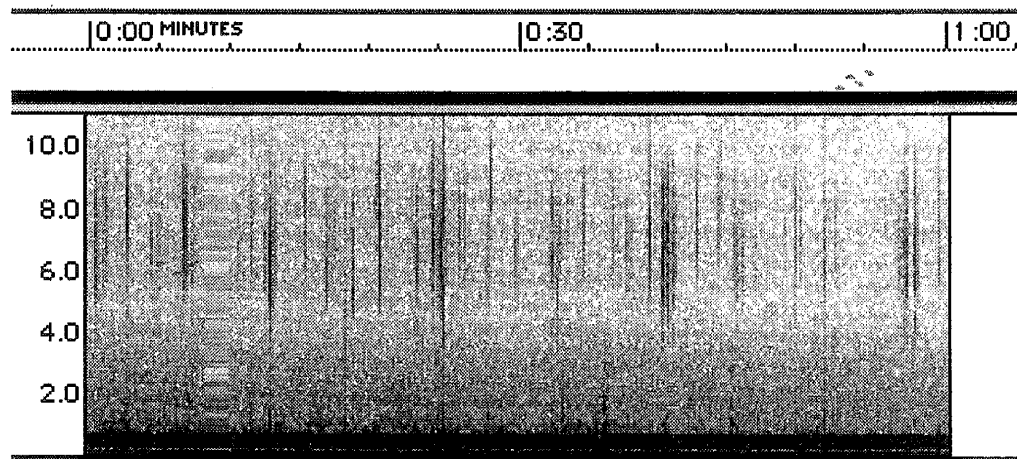
Team E5 Renato Romero, Cumiana, ITALY. Strong natural radio signals, but persistent strong hum below 2 kHz with hum extending up to 4 kHz.



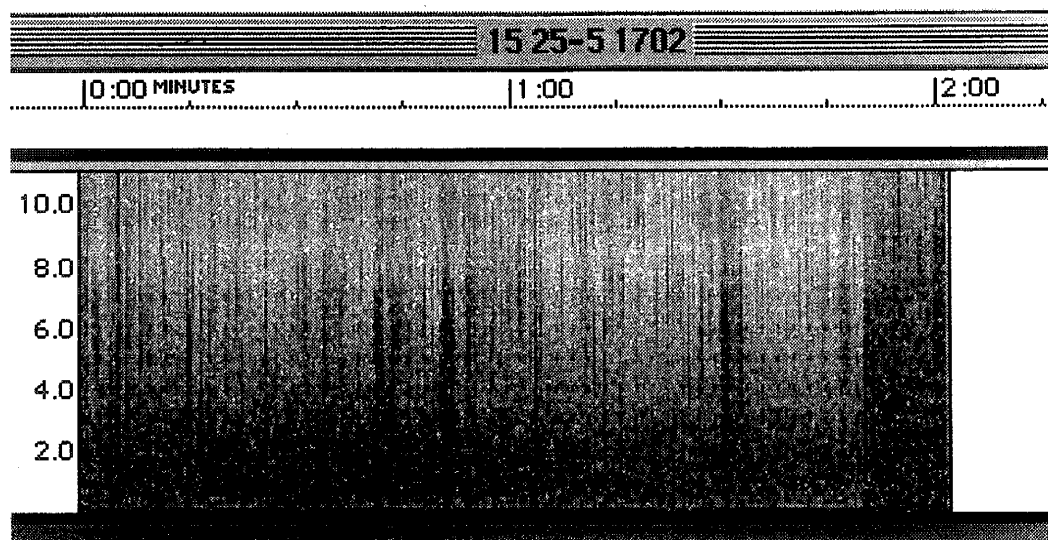
25-4



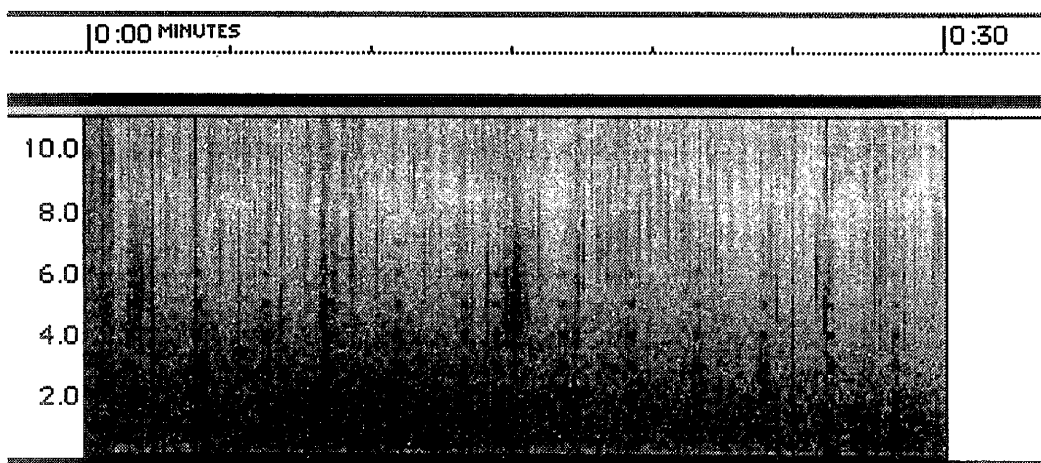
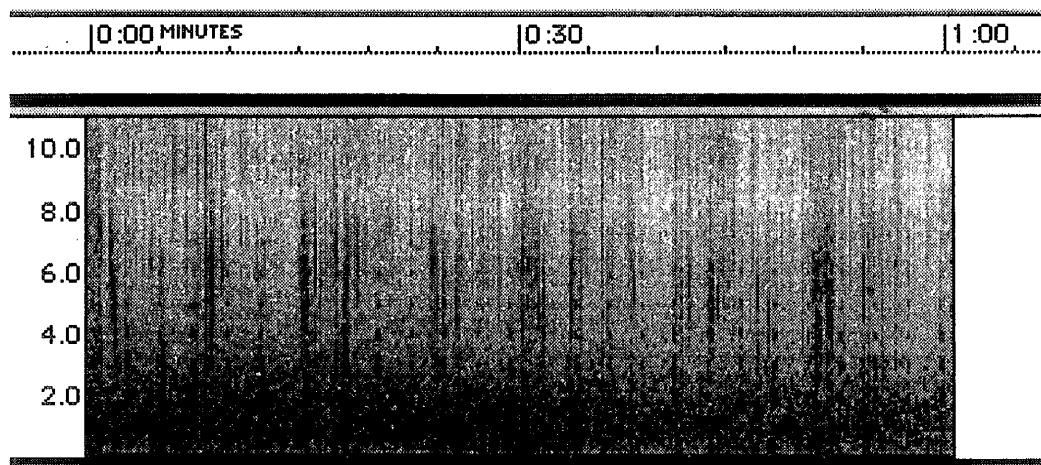
Team 28 Thomas Earnest, San Angelo, Texas. Good sferics. Some hum, but it is restricted to below 1 kHz. the arrow points to the 1530 WWV tone.



25-5

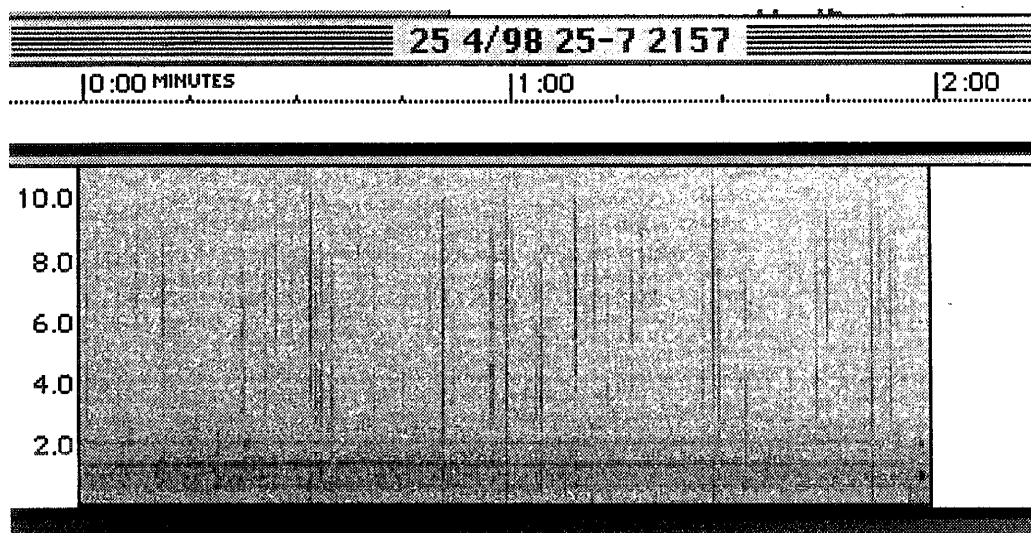


Team 15 Robert Bennett, Las Cruces, New Mexico. Dense sferics and almost no hum.

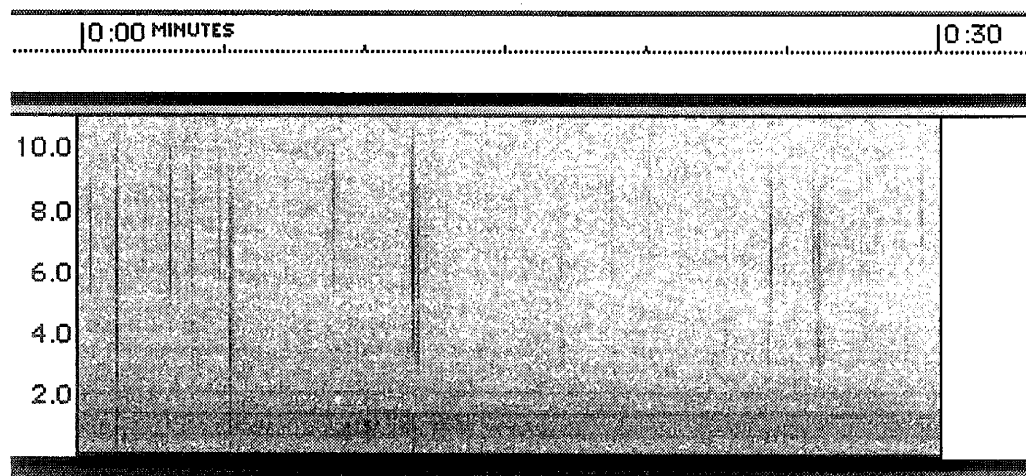
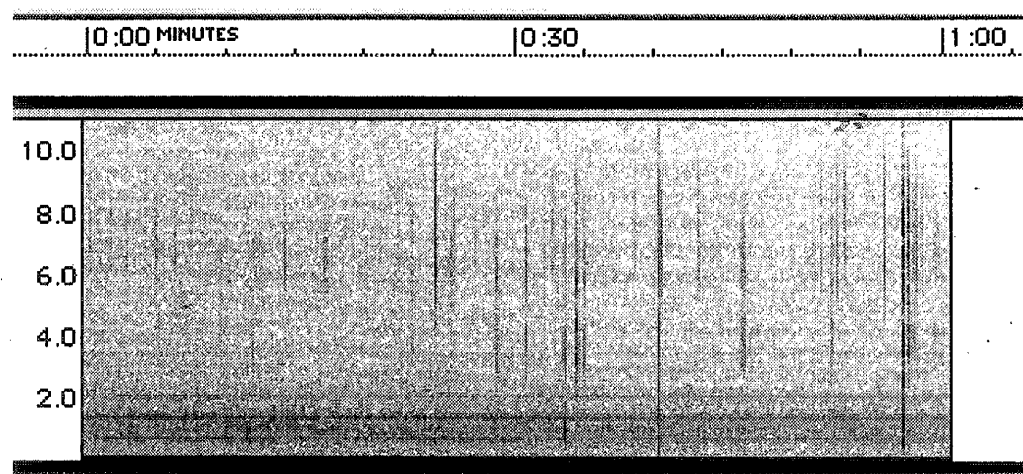


WWV tone is at the beginning. The vertical sets of dots are LORAN signals.

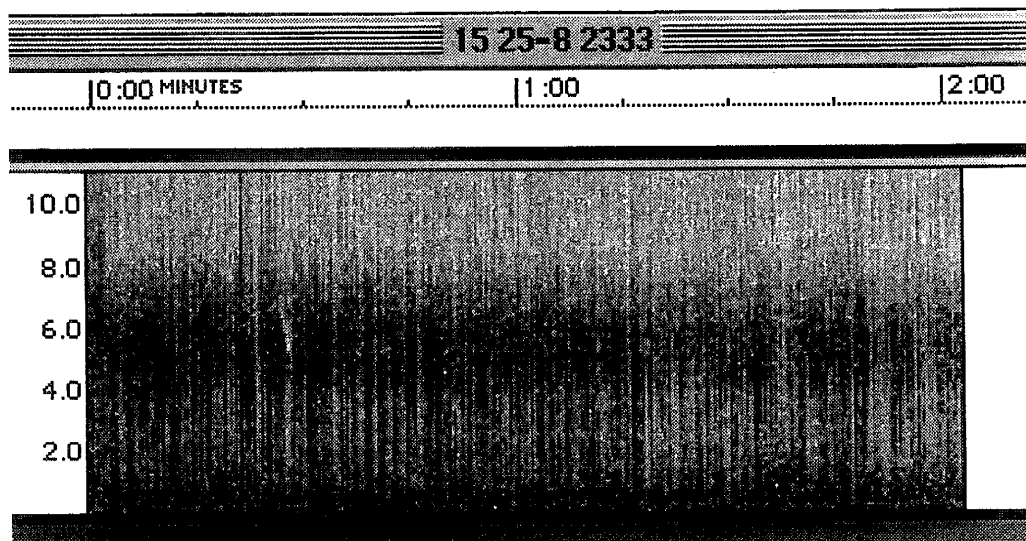
25-7



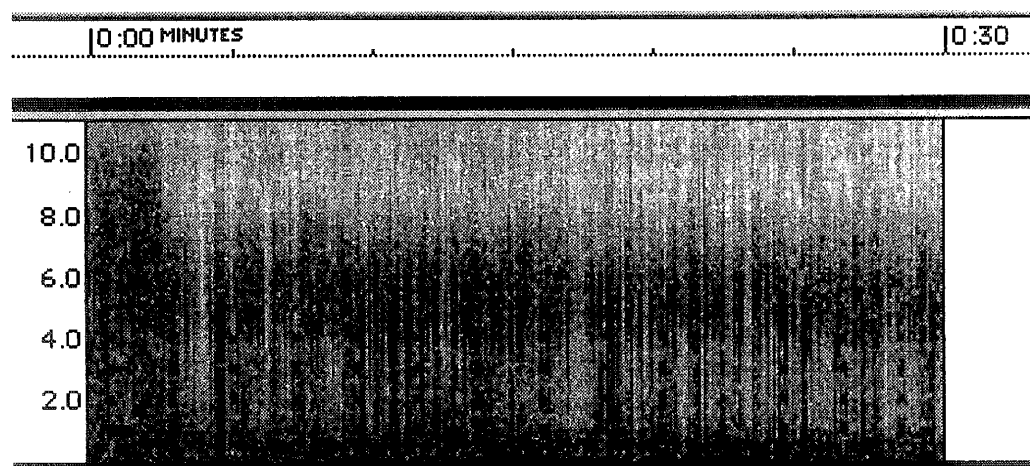
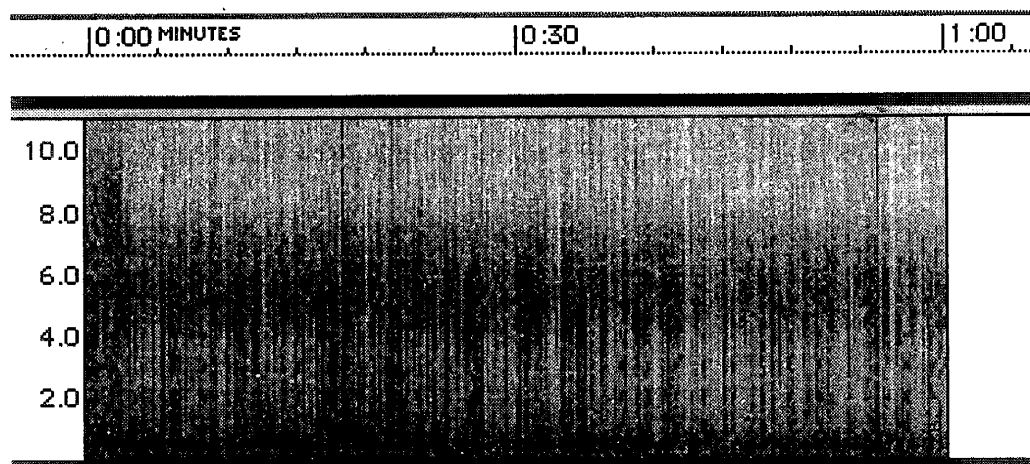
Team 25 Norm Anderson, Cedar Falls, Iowa. Good sferics, some hum. Quiet conditions.



25-8

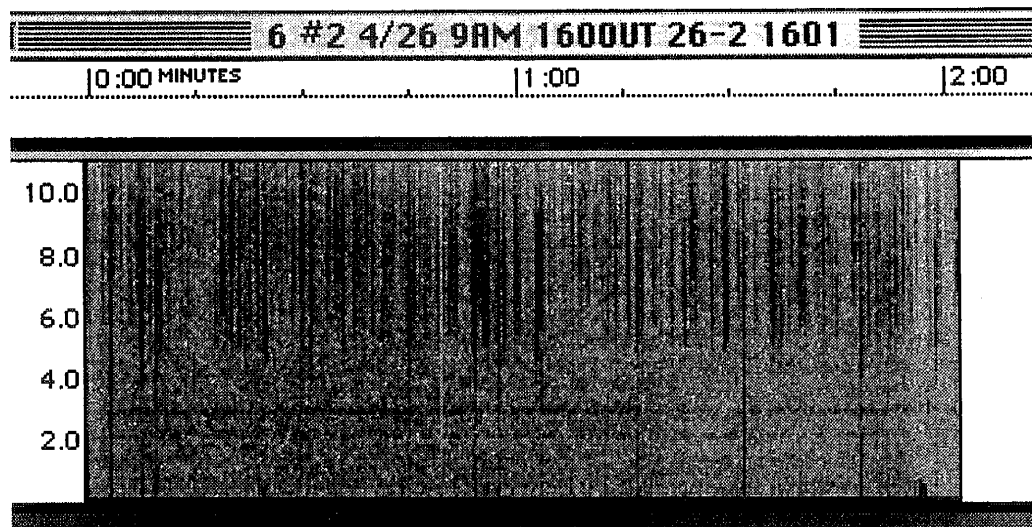


Team 15 Robert Bennett, Las Cruces, New Mexico. Dense, strong sferics. 1533 WWV time tone is visible at the start of the file. Very little AC hum.

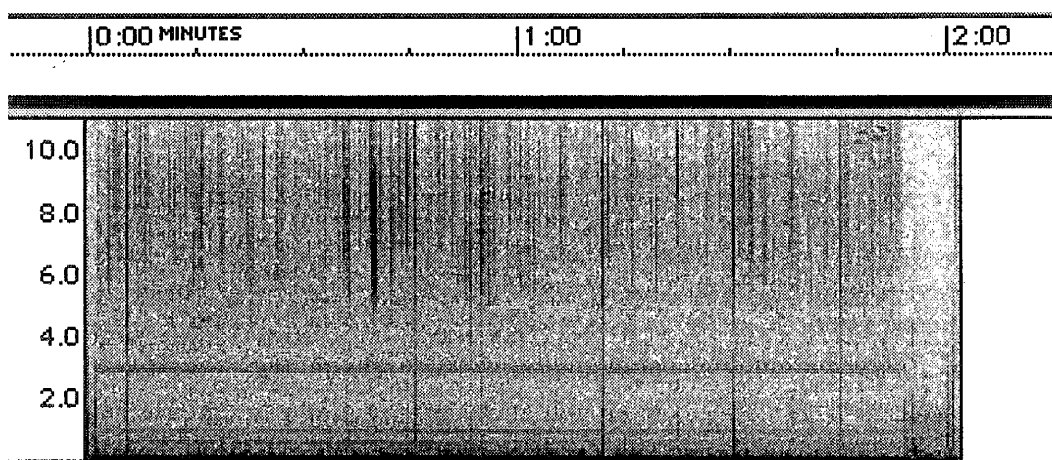


WWV tone at the beginning and LORAN throughout.

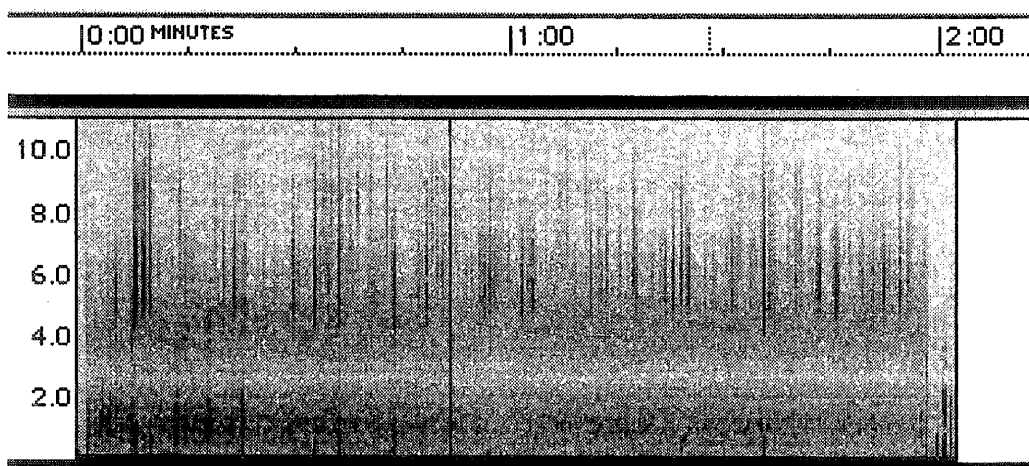
26-2



Team 6 Bill Pine, Chaffey High School, Ontario, California. Dense sferics, low hum. This spectrogram is using an INSPIRE VLF2 receiver with a 2-meter whip antenna.

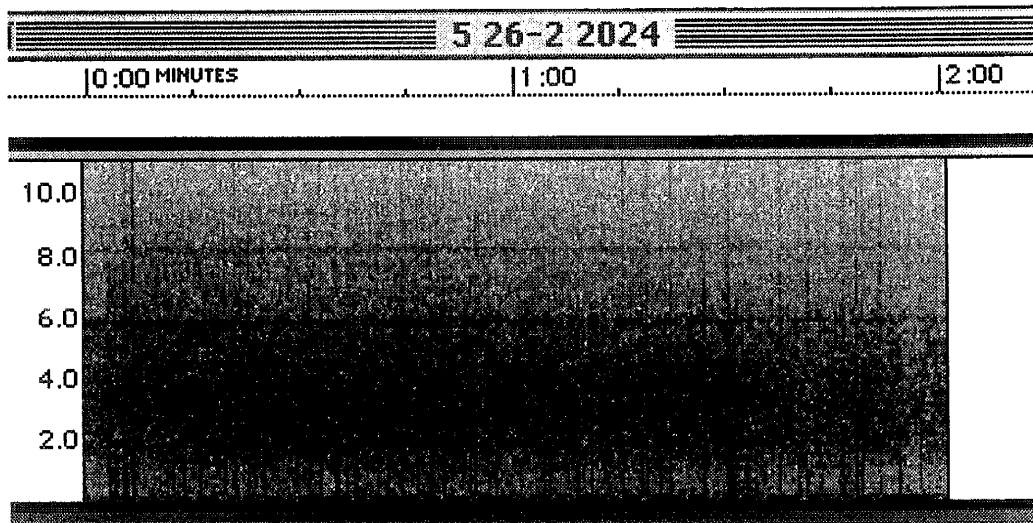


The same time interval as above using an ACTIVE B-field receiver with loop antenna.

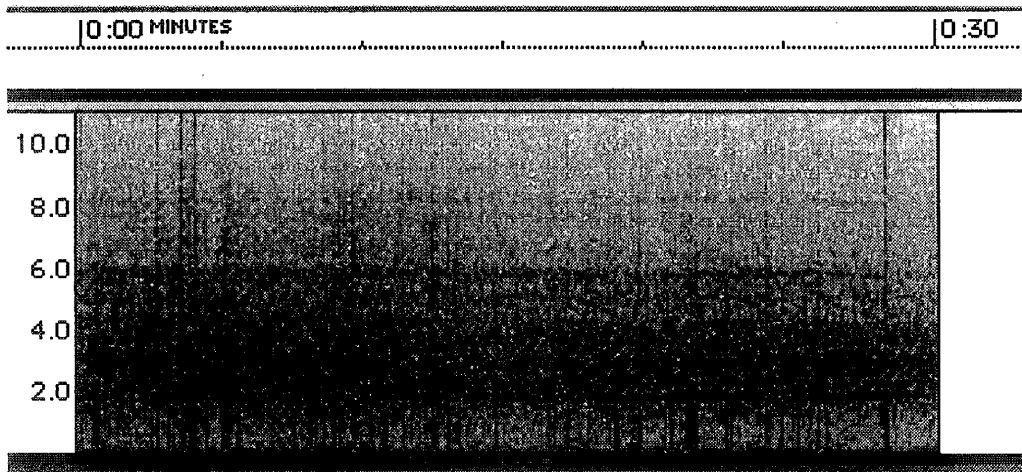
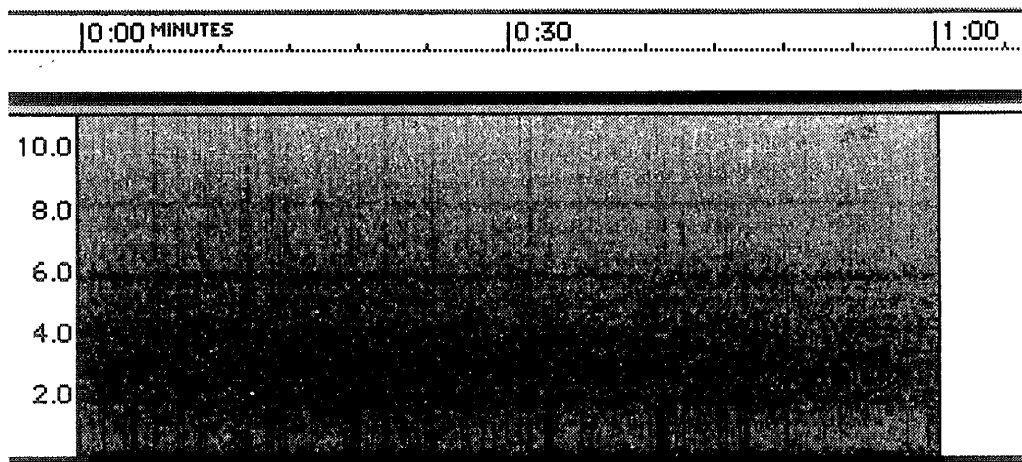


Again, the same time interval, this time using an INSPIRE RS4 receiver with whip antenna.

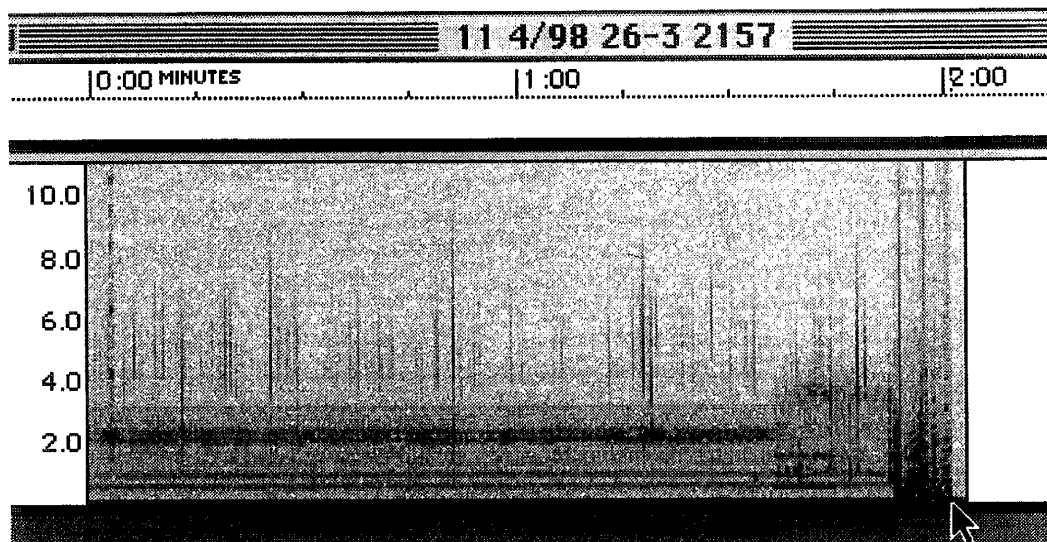
26-2



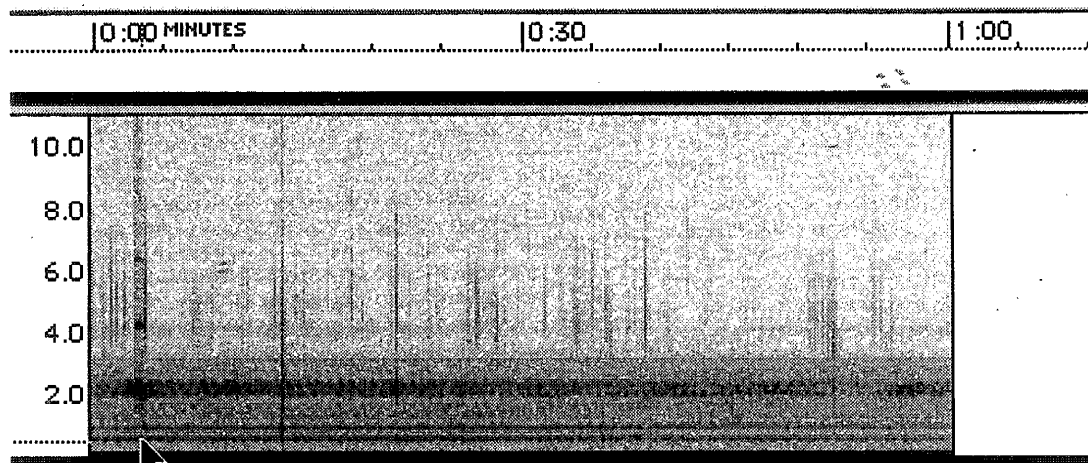
Team 5 Jean-Claude Touzin, St. Vital, Quebec, CANADA. Dense sferics, no hum.



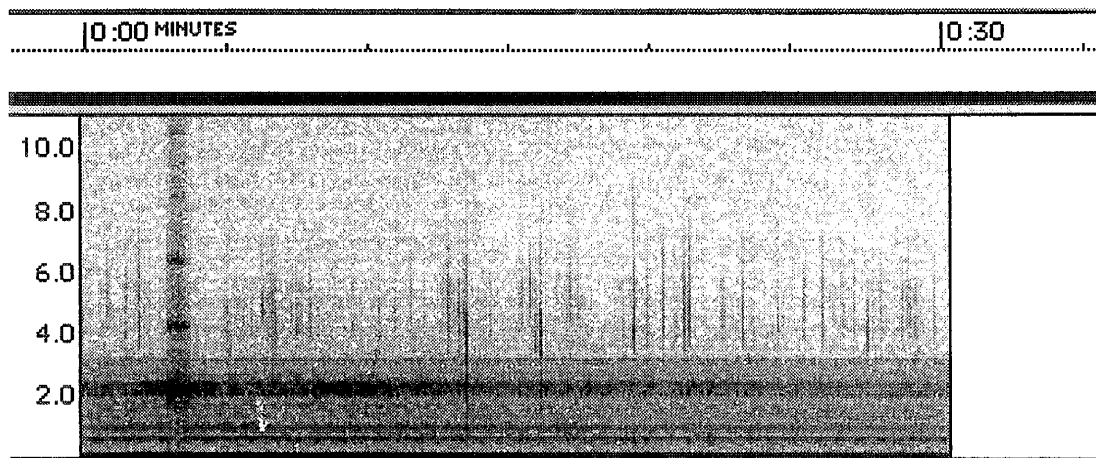
26-3



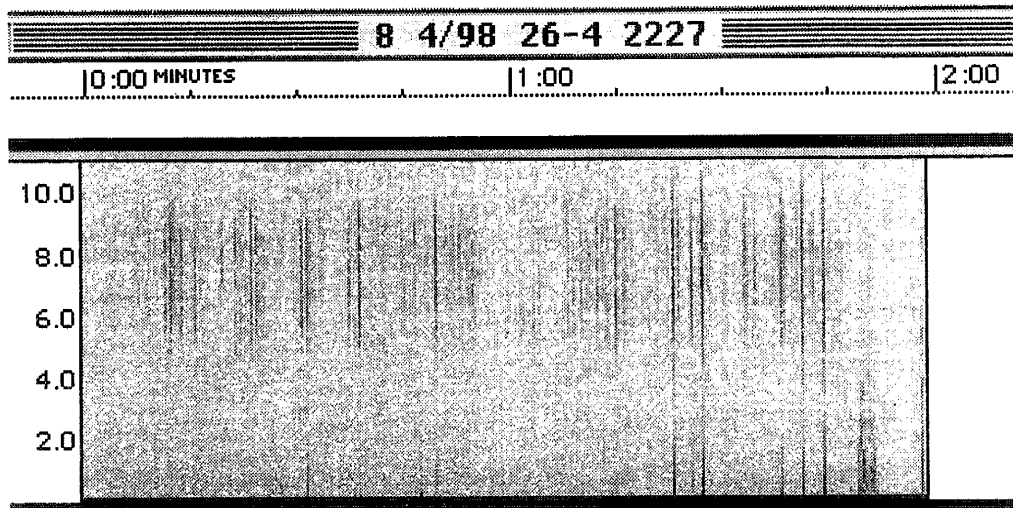
Team 11 Mark Mueller, Brown Deer High School, Brown Deer, Wisconsin. Good sferics with some hum. this level of hum does not affect data quality at the lower frequencies. Arrow: WWV.



Arrow: Brief oscillation in receiver indicating receiver level slightly too high.



26-4



Team 8 Mike Dormann, Seattle, Washington. Good sferics, quiet conditions, no hum.

