

Chris Bristow wrote:

I have had serious doubts about the dicta belt ever since I read McClain's statement He said he had pulled to a stop when the head shot happened. The engine sounds very much like a 45 cubic inch police 3 wheeler doing maybe 23,00 rpm. It sounds nothing like an idling 74 cubic inch motor. I know the sound comes across as a pattern of static, but the 45ci harley is very distinct. Here is a good example of a harley 45 tricycle. In addition to the piston sound they have this hum that sounds like steel wool rubbing against sheet metal.

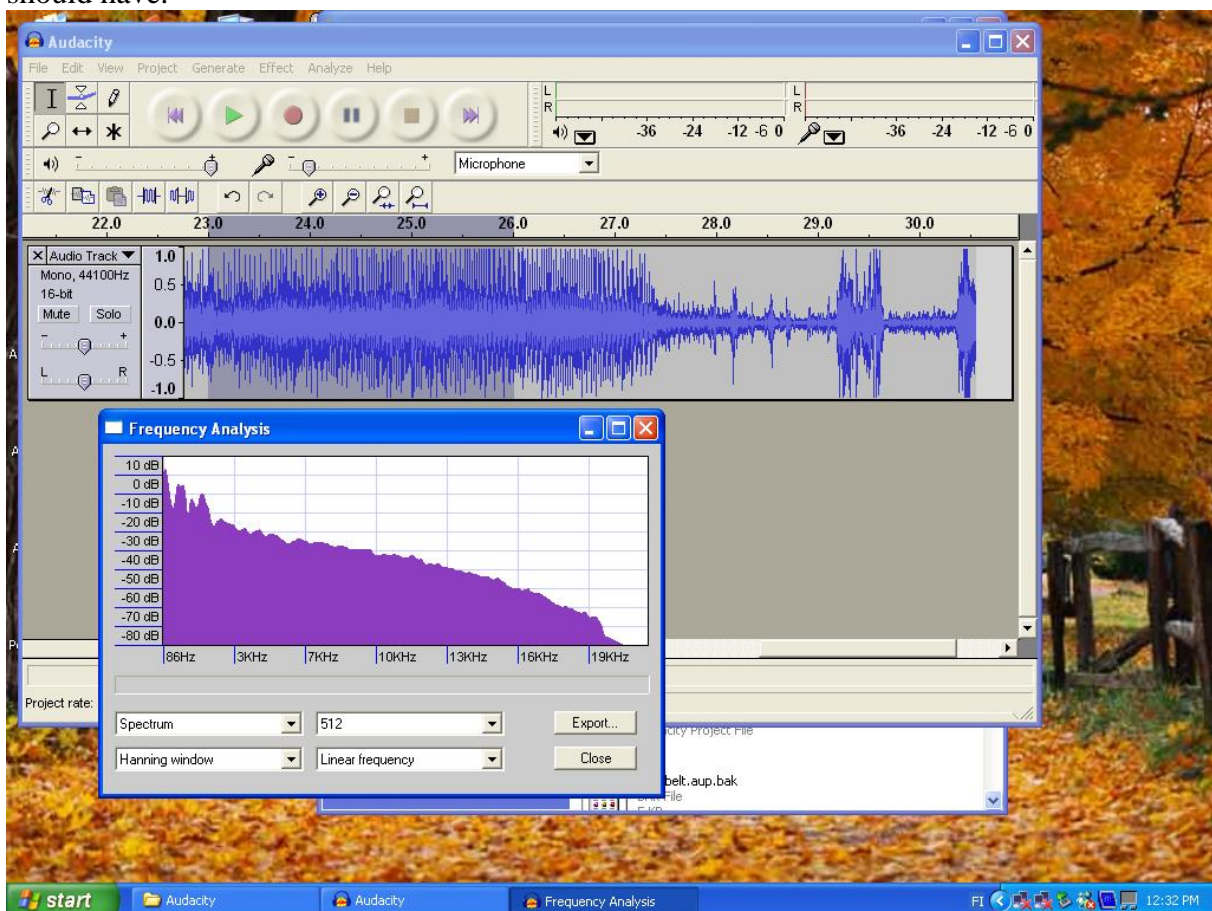
<https://www.youtube.com/watch?v=vMaFghu3IYU>

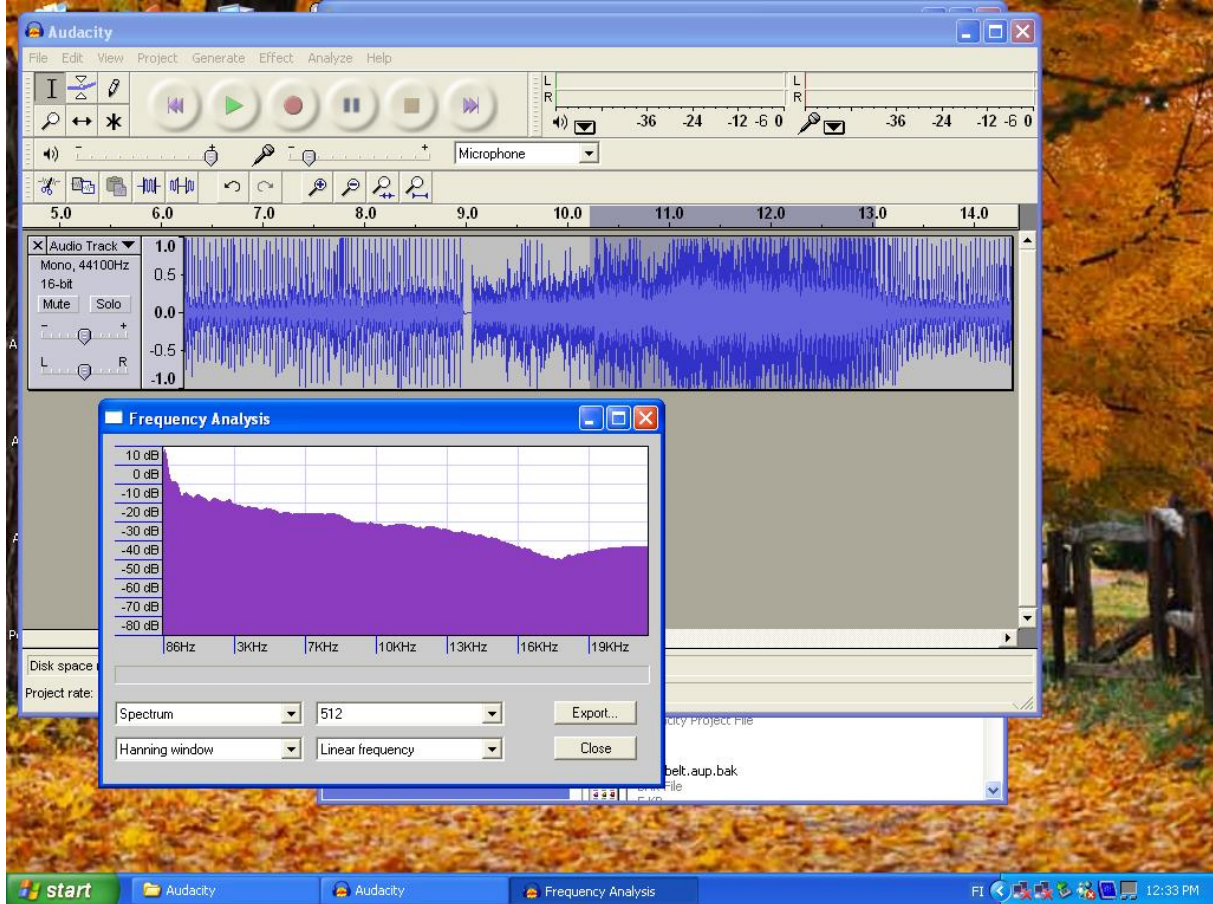
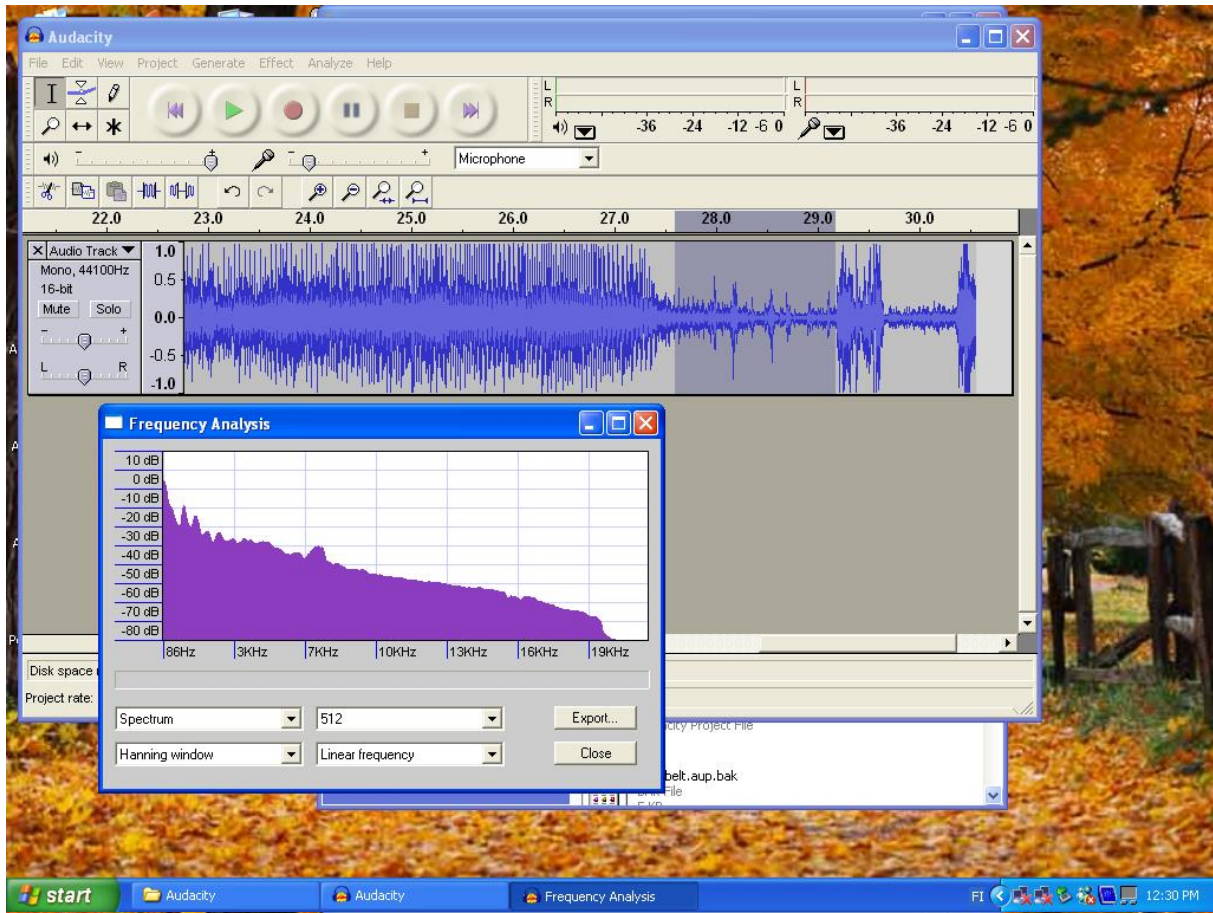
Were you able to determine the rpm recorded on the dictabelt?

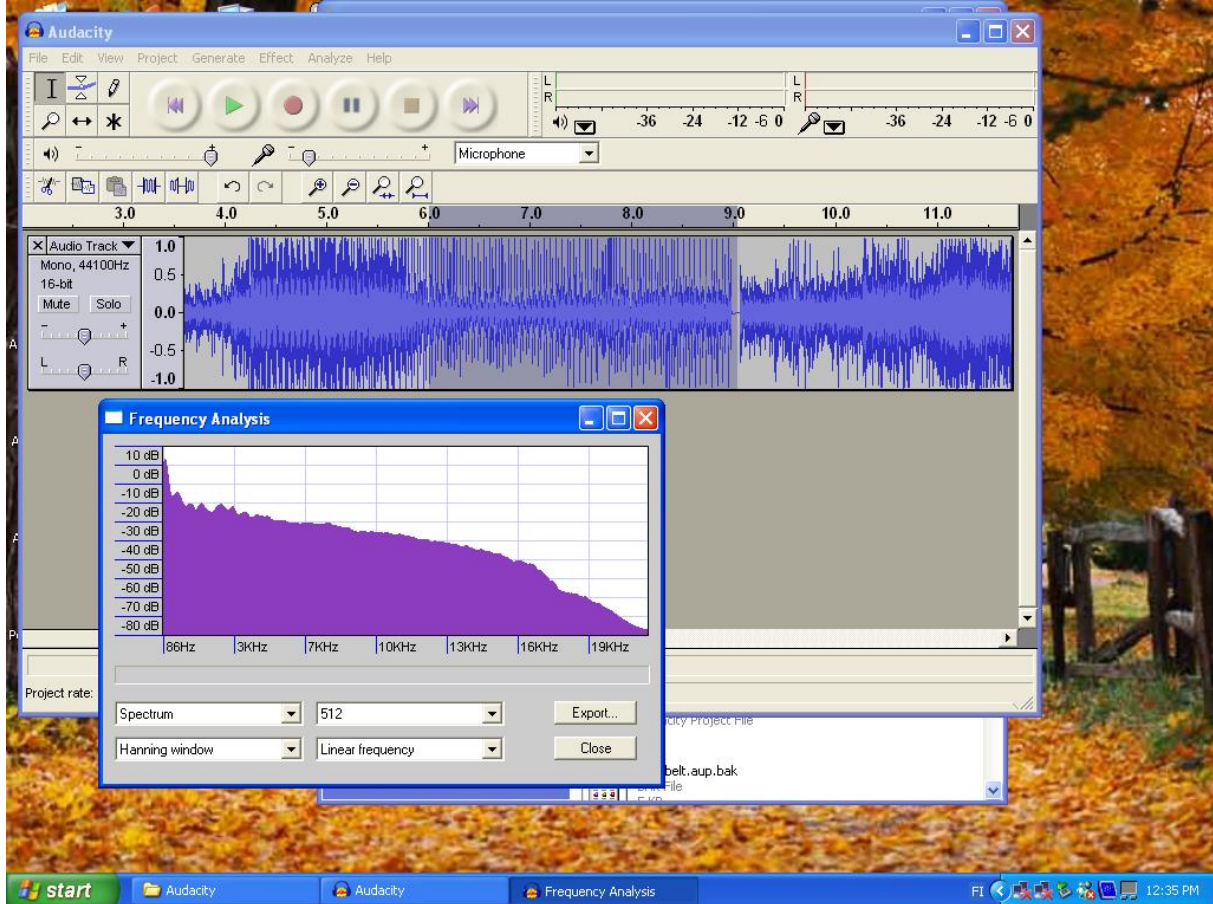
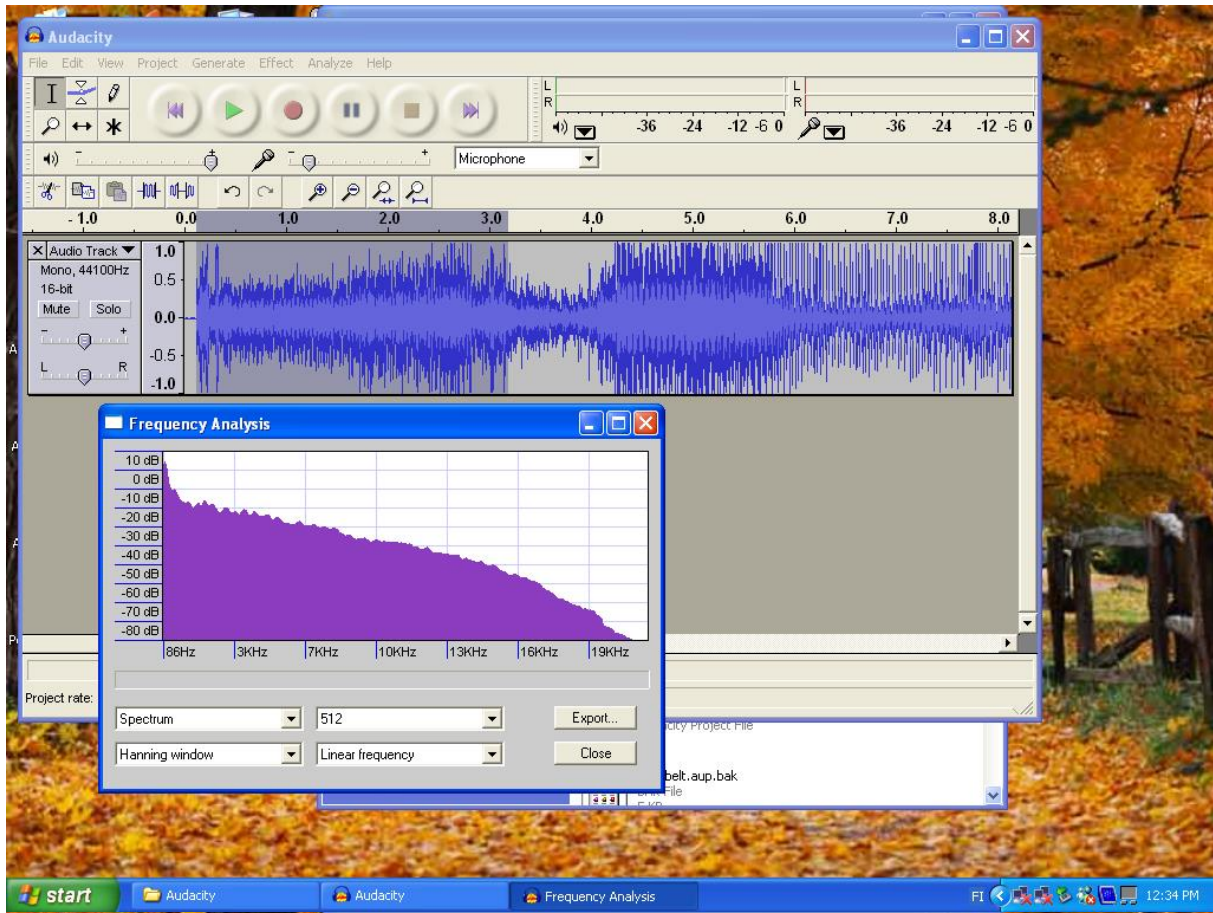
Answer:

The motorcycle noise on Dictabelt has the maximum at 1100 Hz, which corresponds to about 18 rpm. The motorcycle noise is very different from the three wheeler on the video. Included are five plots from the three wheeler and three from the Dictabelt motorcycle. In my opinion the machine is not the same.

First the three wheeler, you can read the time from the start of the video from the part that is darkened. The power spectrum is over that interval. There are peaks around 1550, as 26 rpm should have.







The following plots are from the Dictabelt. Notice that a large part of the difference comes from the communication channel. The police radio has the official band maybe 600-3400 Hz and so it attenuates both high and very small frequencies. Still it does not create artificial peaks, these peaks are at 1100 Hz, 18 rpm.

