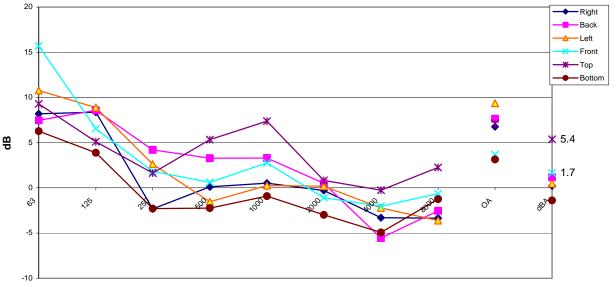
## **DTV Quieting**

The DTV is a piece of GFE that originally did not meet the Orbiter spec. It has six little muffin fans all rigidly attached to the front face. Not only did the fans produce wind noise, they also produced excessive vibrations causing the metal box to resonate.

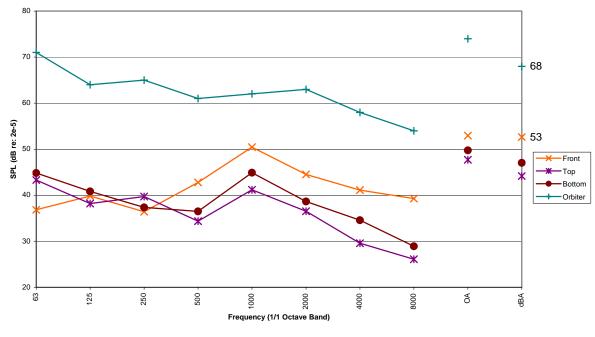
The team added a layer of Bisco HT-800 to the front side of the fans to cushion them before attaching them to the faceplate. Data was taken before and after the treatment. The graph below shows how much attenuation was achieved per frequency band. There was over 5 dBA of attenuation for the top face since 7 dB of reduction was seen at 1000 Hz.



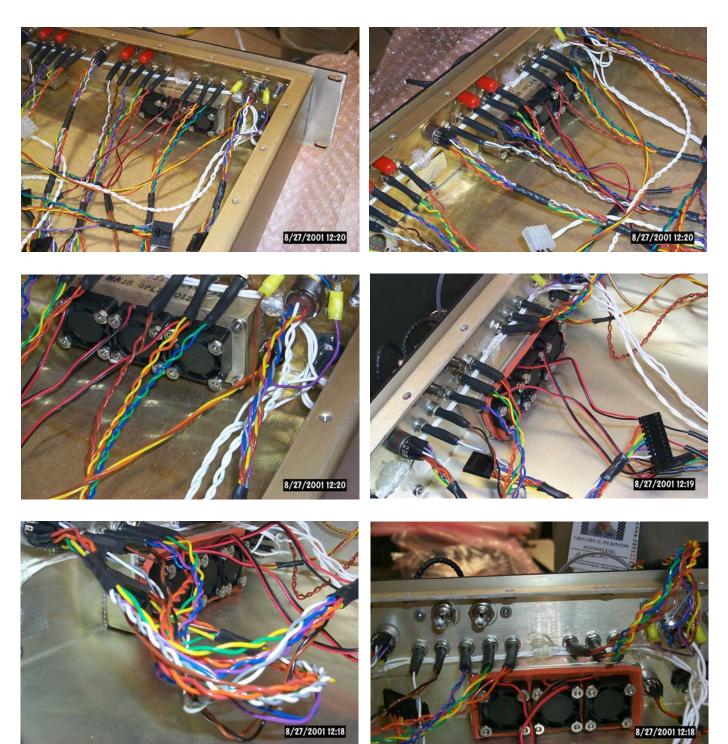
## **Treatment Deltas**

Frequency (1/1 Octave Band)

The next graph shows how the DTV compares to the orbiter spec after the padding was applied.



Here are some pictures before and after the treatment. The first three are before treatment, and the last three are after the treatment...



G. Pilkinton 09/30/2003