

Re: Sound meter readings from 31 engine static fire

Barnett, Joseph R <joseph_barnett@fws.gov>

Wed 2/15/2023 10:52 AM

To: Perez, Chris <chris_perez@fws.gov>; Bilodeau, Stephanie A <stephanie_bilodeau@fws.gov>; DeLaGarza, Imer <Imer_DeLaGarza@fws.gov>; Gardiner, Dawn <dawn_gardiner@fws.gov>; Orms, Mary <mary_orms@fws.gov>; Reyes, Ernesto <ernesto_reyes@fws.gov>

I think we haven't found a unit that can go beyond 130db. So it would max out fairly quickly

Joseph Barnett
Deputy Refuge Manager
Lower Rio Grande Valley NWR
3325 Green Jay Road
Alamo, TX 78516
(928)919-0966

The wildlife and its habitat cannot speak, so we must and we will." – Theodore Roosevelt

From: Perez, Chris <chris_perez@fws.gov>

Sent: Wednesday, February 15, 2023 10:45:46 AM

To: Bilodeau, Stephanie A <stephanie_bilodeau@fws.gov>; Barnett, Joseph R <joseph_barnett@fws.gov>; DeLaGarza, Imer <Imer_DeLaGarza@fws.gov>; Gardiner, Dawn <dawn_gardiner@fws.gov>; Orms, Mary <mary_orms@fws.gov>; Reyes, Ernesto <ernesto_reyes@fws.gov>

Subject: Re: Sound meter readings from 31 engine static fire

Ok, so those readings were taken from exactly 3 miles away from the source. Highest reading 110db. Ok, so for perspective, this is equivalent to a jackhammer or power saw but below a thunder clap.

From: Bilodeau, Stephanie A <stephanie_bilodeau@fws.gov>

Sent: Wednesday, February 15, 2023 10:35 AM

To: Barnett, Joseph R <joseph_barnett@fws.gov>; DeLaGarza, Imer <Imer_DeLaGarza@fws.gov>; Perez, Chris <chris_perez@fws.gov>; Gardiner, Dawn <dawn_gardiner@fws.gov>; Orms, Mary <mary_orms@fws.gov>; Reyes, Ernesto <ernesto_reyes@fws.gov>

Subject: Sound meter readings from 31 engine static fire

Good morning,

Attached are the results from UTRGV's sound meter during the 31 engine static fire. The coordinates of the device are listed on the spreadsheet, but for reference it was almost exactly 3 miles away from the launch mount. From what little I've gathered about sound interpretation, the "Lz" values are Z-weighted values, which essentially means no weighting at all, while "La" values are A-weighted values, which applies different weightings to different frequencies based on human hearing and is what is frequently referenced in noise impact studies. So perhaps the best value from these results to compare to expected values would be the "Lpeakmax" value of 110.8 decibels. I'm not sure what the exact expected value would be in the location we placed the sound meter, but based off the "booster static fire" figure on page 38 of Appendix B of the PEA, it appears the device was somewhere between the 90 and 100 decibel contours. But I'm not sure how many engines that diagram is based on. So let me know if you all come up with a better way to interpret this data, or if you have any questions that I might be able to answer or can relay to Dr. Berg at UTRGV.

Thanks,

Stephanie Bilodeau

Wildlife Biologist

U.S. Fish and Wildlife Service

Lower Rio Grande Valley NWR

3325 Green Jay Rd.

Alamo, TX 78516

Mobile: (802) 309-5171

Office: (956) 784-7512