

Re: Sound levels for launch #4

Orms, Mary <mary_orms@fws.gov>

Mon 6/10/2024 11:41 AM

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

Great info Stephanie. Thank you. I do have some questions. But we probably need to get together and discuss, this, David's info and others really soon, just really tied up but will try to talk to Dawn and Chuck about it.

Mary

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

Sent: Monday, June 10, 2024 11:34 AM

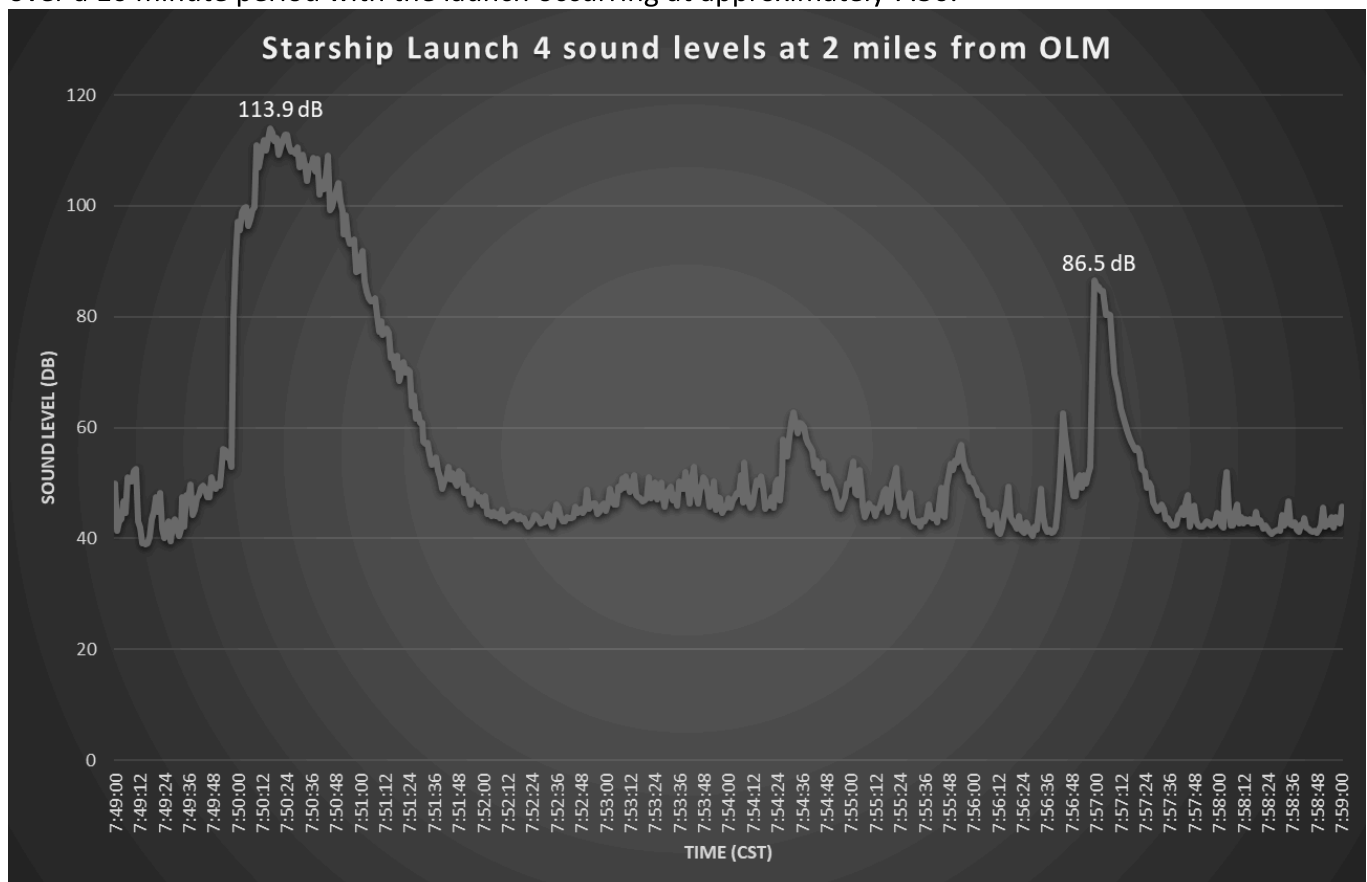
To: Perez, Chris <chris_perez@fws.gov>; Orms, Mary <mary_orms@fws.gov>; Gardiner, Dawn <dawn_gardiner@fws.gov>; Reyes, Ernesto <ernesto_reyes@fws.gov>

Cc: DeLaGarza, Imer <Imer_DeLaGarza@fws.gov>

Subject: Sound levels for launch #4

Good morning,

For launch #4, our sound meter was placed at the same location as it was for launches #1 and #2 at approximately 2 miles away from the launch pad. Below is a graph showing the variation in sound levels over a 10 minute period with the launch occurring at approximately 7:50.



The max dB recorded was 113.9 (compared to 114.9 dB and 114.5 dB for launches #1 and #2 respectively). The slight variation in recorded levels between launches could be due to environmental factors. You'll also notice a second jump in sound levels occurring at approximately 7:57, which I believe was from the reignition of the booster engines as it splashed down in the gulf.

I also placed a game camera near a Wilson's Plover nest approximately 0.7 miles south of the launch pad which captured the bird's movement away from the nest during the launch (photos attached). Interestingly, the bird did not get off the nest until the rocket had cleared the top of the tower at least 13 seconds after engine ignition which means this bird must have experienced the maximum sound level at around 0.7 miles from the launch pad, unfortunately we don't know what the sound level was at that distance, but likely higher than the 113.9 dB recorded at 2 miles away.

Please let me know if you have any questions.

Thank you,

Stephanie Bilodeau

Wildlife Biologist

U.S. Fish and Wildlife Service

Lower Rio Grande Valley NWR

3325 Green Jay Rd.

Alamo, TX 78516

Mobile: (956) 475-8420

Office: (956) 784-7512