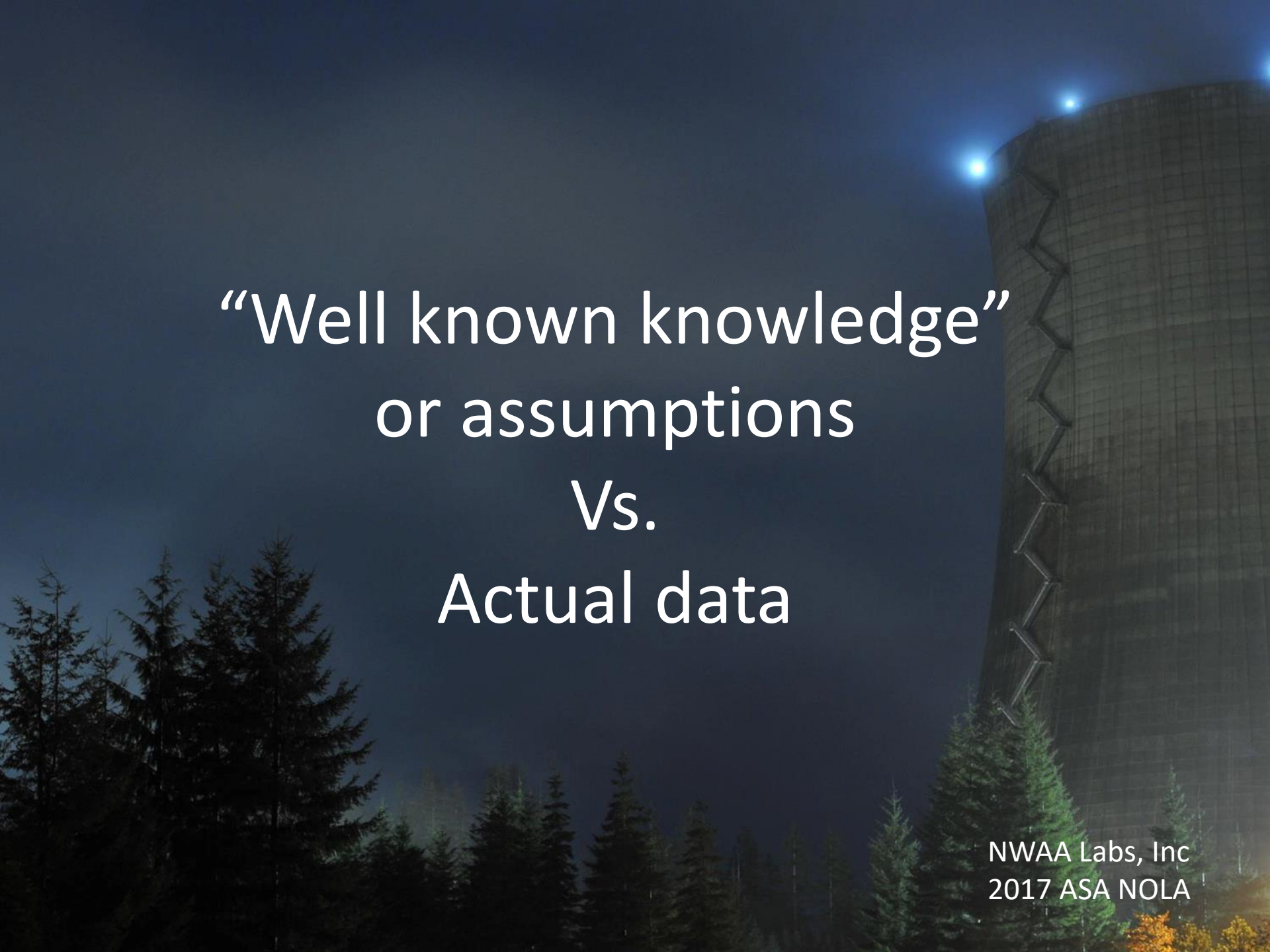


Absorption:

The misunderstandings about what can be measured and the newest ideas of how to perform these measurements.



“Well known knowledge”
or assumptions
Vs.
Actual data

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No, No, No, FIELDER! IF I'VE SAID IT ONCE,
I'VE SAID IT A THOUSAND TIMES - USE THE
WHISK! I HATE TO BEAT A DEAD HORSE BUT,
WELL... IT IS OUR JOB.



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A coefficient is not a
percentage!!!!

0.9 absorption coefficient is NOT
90% absorption!!

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Absorption

Myth: We can measure absorption

Fact: We cannot measure absorption directly. We measure the differences in the reverberation time in a reverberation room and use that to determine the amount of absorption needed in the room to effect that change.

Absorption



Myth: Acoustics is a “settled” branch of physics

Fact: There is fundamental research going on today and new facts are being written daily that are as basic as Sabines work

Absorption

Myth: Baffles have twice as much absorption when both sides are exposed to the room

Fact: Baffles measured have an average of 1.2-1.3 times more absorption when hung in a room

Absorption

Myth: Baffles have effect
depending on their arrangement.
i.e. Parallel, Boxed, Herring bone and others.

Fact: None of these makes any significant
difference to the absorption of a room.
The spacing between individual units can
be used to increase the real absorption of the units

Absorption

Myth: Wall mounted panels that are spaced off of the walls will increase their low frequency absorption as the space behind increases.

Fact: This is only partially true. The low frequency absorption only increases when the spacing from the wall does not exceed 1 inch. The effect disappears after 1 inch. This only applies to unimpeded airspace.

Absorption

Myth: BIG ONE!! Absorption is controlled by the size (area) of the absorber.

$$\alpha = A/S \text{ or } A = \alpha * S$$

Fact: This is not true at all.

Previous presentations have shown this to be the case.

The ratio of perimeter length to the area and spacing between units are the controlling factors.

I apologize if this is YOUR
Ox that has been gored




NR

**THE
OX**

Acousticians vs “Them”





Thank you for your attention.
If you wish more information
on this subject please contact
me at 253-973-1018 or at:

Audio_ron@msn.com

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