

Re: air speed measurement above mach 1

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- *From:* jimp@xxxxxxxxxxxxxxxxxxxxxx
 - *Date:* Tue, 26 Jul 2005 03:43:24 +0000 (UTC)
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Randy Poe <poespanm-trap@xxxxxxxxxx> wrote:

<snip>

- > It gets very quiet, because he no longer hears the loud
- > sound of the engines propagating from wing to cockpit. He

Actually from engine to cockpit through the air. Not all engines are mounted on the wings. Most fighters don't have wing mounted engines.

- > can still feel and hear vibrations propagating through the
- > metal of the aircraft, but these are much quieter than the
- > jet engine sounds you hear (through the air) below Mach 1.

Also missing is the sound of the aircraft going through the air which is a lot of noise in any airplane at any speed.

<snip>

- > No, quite the opposite. The sonic boom is created at the
- > wings and never gets to the pilot, as he is moving faster
- > than sound.

The shock wave is created by the entire aircraft, not just the wings.

There is a lot of research going on to determine which parts of the airframe are most responsible for the shock wave and if it can be reduced.

- >> By the way, the fighter pilot hears the sonic boom has we (on the
- >> ground) do? Does he feel any kind of reaction on the plane at Mach1?

- > I don't know what he feels except acceleration. But he
- > definitely does not hear the boom. He is ahead of the boom.
- > It will never catch up with him.

The typical airplane will shake a bit during the transition.

Nobody flies at Mach 1 +/- a tenth or so except to transition.

<snip rest>

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Jim Pennino

Remove .spam.sux to reply.

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• **References:**

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