Projectiles: Disciplines of Flight

In “Disciplines of Flight” we must consider most projectiles that fly do so with a wall of some projector behind it.

If one looks at a bullet we see something that **NASA** did not discover themselves until we approached the sound barrier in an aircraft; ***Drag***. Don’t think they ever heard of **Joseph Whitworth or their task of passing through the speed of sound would have been made much easier.** But in any case, by accident, a man at NASA (whom I would have to look up to recall his name); “discovered” what Whitworth probably did not know himself in 1850 what NASA called the **“Area Rule.”** In any case the **Area Rule** is just a name for the aerodynamics more or less of a solid body movement through air. It says, (and I agree) that a reduction in “Contour” or “shape”, is proportionate to a reduction in drag. In other words, if you reduce the **contour of a Mass;** in flight it will offset “drag of the Mass” proportionally. In an Aircraft shape as example, making the nose larger than the aircraft mid section that reduction in surface area **will offset the drag in an equal amount of the wings**.

End of story. Uuuh, almost.

So now we know **HOW** Whitworth’s bullets flew in part….. The secret however is how to make projectiles fly faster and farther. My projectiles do that for a number of reasons I can share beginning with “surface area”……Looking at the attachment of projectiles used in the Military today we see old technology combined with some good thought. You see a **“Spitzer”** shaped point there. Smart we point into the direction of flight. We see a **“Boat tail”** there to further reduce drag on the bottom of the projectile. That’s good to reduce turbulence; and that is just about it. Nothing real unusual; AND, no Area Rule applied to flight
either.

Many shapes, weights and sizes; but do these projectiles really fly? What can we do to improve distance of flight (and speed) without changing anything with the load or projectile they might have missed?

The answer is; **the surface**.

Karl Lippard Designed projectiles **"levitate".** What does that mean? It means they resist the forces of gravity and atmosphere. (Newton's Law) Well part of the secret is exposed in text above surely but how does one make these bullets in example perform better? The answer comes from the sea. Most fish "levitate".

Let's take a big fish, for example a Shark.

When a big fish sails thru the water with such mass one would have to ask: "Why is that? How is that possible?" And if you feel a Shark's skin it is rough.

The answer is; it's the ROUGH nature of its surface that provides lift and reduces friction! How? It creates turbulence over its skin, and turbulence reduces drag. Water actually touches less that 10% (estimate) of the fish's surface. **It levitates thru the water!!!**

So back to these bullets shown in example; WHAT CAN WE DO?

It's simple really; **you walk over to the bead blast cabinet and do what? Right, with a fine mist of glass beads you blast the surface. You're done! Not difficult. You now have projectile Levitation!!**

So will these examples shown fly better and compare with Karl's projectiles? No. Like the Shark one has to read **"Powder And Explosives,"** think about the **"Area Rule",** treat their surfaces for sure, and you will have advanced to within 50 years of the bullets designed for Hyper Speed in the **Karl Lippard 1911 A3 pistol**.

Karl Lippard Designs rule the sky with advanced projectiles. We are friends of Newton.