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How Aeroplane Will Move Faster With Less Consumption Of Fuel?

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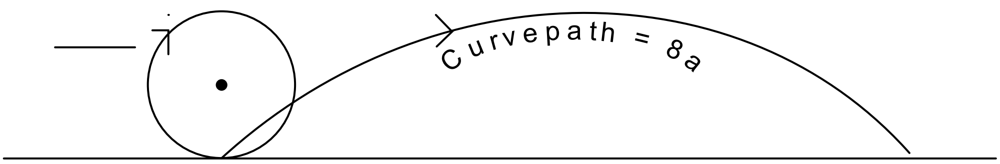
ABSTRACT: *Everybody moves vertically more distance on a curved path to cover horizontally less distance on a straight line path. Due to this reason,inertia of motion takes place in a body.If the wings of the aeroplane will be designed in 14:11 cycloid size then the wings will make inertia of motion in air.Again as the top of the wing is more distant than the bottom,so the pressure on the top of the wing is less than the bottom of the wing.As a result of which, the resultant pressure occurs from bottom to top.So,the aeroplane floates & moves faster.*

A bird flies making curves in air by its wings. A fish swims making curves in water by its fins. Similarly a vehicle moves on the road making curves by its wheels. This implies that everybody moves from one place to another by making curves on any medium of path.

When a wheel rolls on the road, a point on the wheel, which touches the road moves vertically on a curved path to cover horizontally a straight line path in one rotation. The curved path is a cycloide, whose length is calculated, by the length formula of calculus as 8a. A wheel covers $2\pi a$ distance on a horizontal path in its every rotation, where 'a' is the radius of the wheel, which generates the cycloide. The cycloide is an arc of a circular path, whose radius is 'r'. A wheel moves on the road by making curve in its every rotation. This implies that a point on the wheel which touches the road moves on it by making curve in its every rotation.
From the above fact a theory can be derived as follows:

CURVE THEORY: *Every body moves vertically more distance on a curved path to cover horizontally less distance on a straight line path.*



Straight line path = 2πa

The law of motion on the road is applicable to the motion in air and the motion in water.

A vehicle can not move on a curved path without a centripetal force. The centripetal force acts along the radius and towards the centre of the curved path. The natural tendency of a body is to move uniformly along a straight line. While moving along a curve, the body has a constant tendency to regain its natural straight line path. This tendency gives rise to a force called centrifugal force, which makes the body to move along a straight line. This force acts along the radius and away from the centre of the curved path. The centripetal force $\frac{mv^2}{r}$ takes the point of the wheel, which touches the road vertically, to a distance 8a in the curve, but in the same time the centrifugal force $\frac{mv^2}{r}$ the same point horizontally to a distanced of $2\pi a$. The centripetal force and centrifugal force are equal in magnitude and opposite in directions. So each one of the two forces should move equal distance, but the curve length is greater than the straight line length. 8a>2πa and 8a-2πa = $(8-2\times\frac{22}{7})a=\left(\frac{56-44}{7}\right)a=\frac{12}{7}a.$

This implies that some amount of centrifugal force could not be used for which $\frac{12}{7}a$ distance could not be covered by this force horizontally on a straight line. As the magnitudes of the two forces are equal; So 8a distance should be covered by the centrifugal force $\frac{mv^2}{r}$.

1 unit of distance will be covered by $\frac{mv^2}{8ar}$ Centrifugal force

$\frac{12a}{7}$ unit of distance will be covered horizontally by $\frac{mv^2}{8ar}\times\frac{12a}{7}=\frac{3}{14}\frac{mv^2}{r}$ Centrifugal force = $\frac{3}{14r}\times 2\times\left(\frac{1}{2}mv^2\right)=\frac{3}{7r}$ Kinetic Energy, where ½ mv^2 = KE

Hence $\frac{3}{14}\frac{mv^2}{r}$ centrifugal force is obtained from $\frac{3}{7r}$ Kinetic Energy.

So in every rotation of a wheel $\frac{3}{7r}$ Kinetic Energy is conserved with it to take the vehicle to a distance of $\left(\frac{12}{7}a\right)$ in the next rotation of it. The conserved kinetic energy $\frac{3}{7r}$, which takes the wheel to $\left(\frac{12}{7}a\right)$ distance is called the inertia of motion. Hence a body which moves 8a distance in a curved path to cover 2πa distance on a straight line path haves the inertia of motion. The ratio of the curved path length to the straight line path length = 8a:2πa=8:2π = $8:2\times\frac{22}{7}=\frac{8x7}{7}:\frac{44}{7}=56:44=14:11=$ The ratio of the topside length of a body to the bottom side length of the body. As 8a:2πa ratio size cycloid makes the inertia of motion on the road, so this ratio size body will make inertia of motion in air. If this ratio size body moves in air, then the air which will strike that body will become 8a:2πa=14:11 size wave. The wave of size 14:11 of the air will make the inertia of motion. So every wave of size 14:11 will conserve $\frac{3}{7r}$ kinetic energy to take the body to a distance of $\left(\frac{12}{7}a\right)$.

The aeroplane moves in making curves in air by its two wings. If the two wings will become cycloid size then those wings will make the cycloid curves in air, which curves will make inertia of motion. The best way of designing the wings of the aeroplane is to make the top of the wing cycloid shape and the bottom of the wing flat shape. So the ratio of the length of the top and the length of bottom of the wing = 14:11. In flying the direction of the aeroplane and the direction of the air are opposite to each other. When the aeroplane travels in air, the air travels over the curved side as well as the flat side of the wings. The air travels 14 parts length on the top cycloid side and 11 parts length on the bottom flat side of the wings at the same time. So 14:11 size waves of air are created by the wings as a result $\frac{3}{7r}$ unit of kinetic energy is conserved in each wave to push the aeroplane to a distance of $\left(\frac{12}{7}a\right)$ unit.

Air travels 14 part distance at the top side and 11 parts distance on the bottom side of the wings of the aeroplane at the same time. So the velocity of air on the top side is more than the velocity of air on the bottom side of the wings of the aeroplane. The velocity of air is inversely proportional to the pressure of the air. So more velocity on the top of the wing means less pressure there and less velocity on the bottom of the wing means more pressure there. The top of the wing is less pressure and the bottom of the wing is more pressure. So the difference in the top pressure and bottom pressure of the wing is the resultant pressure. This resultant pressure of air is from bottom to top of the wing, that is why the aeroplane is pushed upward by the resultant pressure to float in air.

CONCLUSION

If the wings of an aeroplane is designed in cycloid shape, then the aeroplane will move faster and float in the air, as a result more distance will be covered in less consumption of fuel.