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Working of Fish like Propulsion System

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***Abstract*: Today in the world of globalization, trade relations in between various countries are building up. For all these transportation of goods plays a major role. Transportation across the globe puts a major cost tag on the good. If this cost tag can be reduced, consumed will be encouraged to purchase and thus trade can grow up. For this purpose i.e. to wan down the cost of transportation lit in very memories to have a good and efficient tans potations media. We can hence the efficient transportation media as the fish like propulsion unit carriers. These units can solve the requirement and turns can be beneficial in trade enhancement as well as people carriages.**

***Keywords*: Float, motor, transmission system, flaps etc.**

1. Introduction

This paper is intended to test and compare various parameters of conventional propeller boats and fish like propulsion boats. For the purpose two scale down models of a boat name as 'CATI89' by Island Design. Only length and wealth, these two parameters were used to build the body of the boat. After construction of the body adequate size of the propeller and fish like propulsion units were fitted on the prototype models. The speed of both motor for both the prototype floats are made from the same material and other constructional parts are also kept same. The construction of both the types is carried out and are put to testing and comparison and thus results are drawn. The possibilities of further modification have been checked out and included in the report.

2. Working of fish like propulsion system

The rotary motion is given to the pulley from the motor. This rotary motion is transform into reciprocating one with the help of the crank link and the reciprocating link. This reciprocating motion is then transform into auxiliary (flipping) motion of the flaps with the help of the wire linking and flap pivots. The angular motion of the flaps is from through 0° to 50° and back. This is same for both the flaps. Keeping the angular displacement much lower would have made the system inefficient, on the other part, keeping it more would have led to extra vibration in the entire unit

These flaps with their angular motion pushes water that comes in contact with them, because these flaps are pivoted at other end the water finds it way away from the flaps in the direction of the fix end. The peculiar motion of the flap creates amplified vortices and pushes them away from the float body, thus the resistance created by the vortices is lowered down, just like fish.

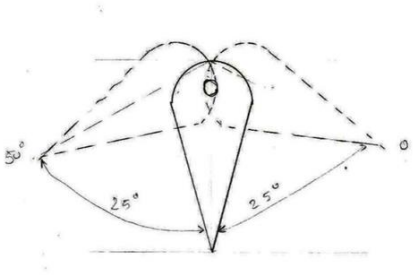

Fig. 1. Motion of flap

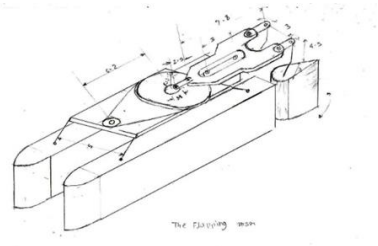

Fig. 2. The flapping msm

3. Advantages of fish like propulsion system

- The fish like propulsion can be very beneficial for sub transmissions and thus can inelegance the efficiency of even arm forces i.e. navy.
- This type of propulsion system saves time and money and in turn fast growing would saving time.
- This type of system can stand beneficial for shipping the industry and hence lies the essensity of such propulsion units.

4. Conclusion

Taking into consideration, the various experiments project work across the globe by major institution and private firms and integrating the results, exhibited by them with the same that has been put forward by this project, few results are certain. Like, this system is more efficient and exhibits good performance at work. This can be widely used in the future

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