Quest Journals Journal of Research in Humanities and Social Science Volume 11 ~ Issue 6 (2023) pp: 277-278 ISSN(Online):2321-9467 www.questjournals.org



Research Paper

Research for Improvement of Safety in Survival at Sea

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Abstract:

Survival at sea in case of unfortunate abandonment of the ship is a real challenge for all seafarers. International Maritime Organization has convened and given a convention called "Safety of Life at Sea". As per this convention after abandonment from ship and during survival in life boat seafarer has to depend on 3 litre of water per person per day, which is really impractical for surviving many days at sea. It also says collect rain, drizzle water but the question is what is surety of rain, drizzle will precipitate during survival days, hence author and researcher has done great research to find out sustainable method of survival at sea. Formation of drinking water and use of SOLAR power in addition to existing mode of power supply will be ensuring the enhance safety at sea.

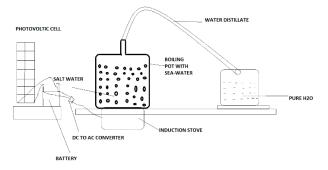
Key Word: Research for perineal source of power supply in survival craft, perineal source of light and small ventilation system in survival craft. Newly designed stronger life boats, newly required hybrid powered life-boat engine.

Received 15 June, 2023; Revised 28 June, 2023; Accepted 30 June, 2023 © *The author(s) 2023. Published with open access at www.questjournals.org*

I. Introduction and Main Text:

I did research with sea water to convert into fresh water with a simple device and how to use same technology in survival craft.

Take an induction stove and run it with the SOLAR cell/ batteries charges by SOLAR photovoltaic cell. Now take a metal pot about 5 litre and boil this water and collect the distillate into another flask. Please look at diagram.



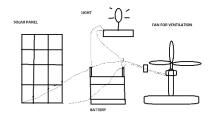
With above given instrument which is not only very cheap but it can improve the survival capacity to a huge extent. This distillate water may be further treated also.

Let me now explain you the principle of Salt-water distillation: Boiling point of water is 100 degrees Celsius while boiling point of Sodium chloride is above 1400 degrees Celsius therefore easily by distillation we can achieve the fresh water.

Secondly source of power supply depending on the solar energy which is a green and perennial source of heat energy and always available to survival craft in day time.

Secondly researcher, is not only informing that it should be used only for water making it can be used for boiling edible fishes for meal, photovoltaic cell cum battery can be used to give power supply to lighting arrangement, power supply to small fans inside the life boats.

Even SOLAR panel can be fitted on the maximum canopy part of the lifeboat so that it becomes a source of power supply for charging the batteries inside survival craft.



Even each life boat must be provided with a hybrid power running engine which could use electrical power for running engine as well as it can use fossil fuel oil for running of engine. If in life boat it has a perennial source of power supply to run engine seafarer can reach to ashore even from longer distance by moving the boat.

Regarding direction seeking, any expert navigator can easily find out directions at sea even without compasses as we know the Polaris configuration, sun's solar diurnal path, how moon's arc tells the direction of east-west at any night time and many more methods can give the direction beyond doubt.

Polaris always tells direction of North, Sun rises between azimuth of 80 degrees to 100 degrees. So moving the boat in right direction and reaching to point of safety is not a difficult thing.

Construction of life boats also must be changed to life-boats made of stronger material rather than made of glass fibre. Similar to rescue boats used from the shore where steel hull or double skinned thicket wood hull life boats are used successfully similarly upgrade might help to seafarer in better survival techniques.

Let us discuss till the time Mr. Samuel plimsoll foot down in British legislative council that safety is more important that loading a ship full and waiting for disaster, similarly now it the time to think how to improve safety of seafarer in survival capabilities. Beyond doubt my research implementation can give new directions to International Maritime Organization in improving the safeties at sea. Life boat should be so strong that even it should be able to withstand in all types of sea conditions.

Even satellite Iridium and other brand satellite mobile phones also should be available in the survival craft so that distress communication can be done even with additional methods.

II. Conclusion:

Conclusion of finding is that if by implementation of these above given new technologies we can improve the safety at sea then it is extremely important that such technology should be implemented asap, International Maritime Organization should make addition of such requirement for survival craft. As earning money in International shipping business should be done with safer way as elaborated in this research journal.

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