

Here, too, there is strength in numbers. A group of swimmers following one another in single file are less apt to be burned and it is much better for two men to swim in front side by side, in order to beat back the flames. Also, in any case, it is easier for rescue boats to spot six or eight swimmers in the water than one alone.

Swimming in oil that is not afire is comparatively simple. Oil, like its refined products (gasoline, kerosene, etc.) spreads out to a thin layer of only one molecule thickness. Because oil has a specific gravity of less than one, it floats on the surface. Consequently, the story of a victim being weighed down and drowned by oil is false. The spread of the oil is slow in the case of thick crude oil, and faster for the thinner oil products. The difficulty a swimmer encounters in oil is choking. Often the oil can get into the mouth and nose and constrict the bronchials. And, too, oil is tiring to swim in because of its lack of weight and resistance. Water (which is fairly heavy) resists enough to allow propulsion through it by strokes used in swimming, but oil tends to merely slide and leave the swimmer in the same spot. Since the wind spreads out the oil rapidly it is most important to swim into the wind - against it. Here again, group action will help prevent panic, make sure that those who need help get it, and keep up courage. And again, the breast stroke is the best because the swimmer can keep his head, mouth, nose and eyes up out of the oil and keep track of his shipmates, and is in a position to save himself.

Oil that has been set afire brings a more difficult problem because of the fact that swimming in it and splashing and pushing the fire away, while not impossible, is much harder than in the case of the light, vaporous liquids, but the stroke to be used is the same. This problem of burning oil does not occur often, but is possible when a ship is shelled with incendiary shells, or when the oil is set afire by high temperatures. However, it does not ignite as rapidly as the refined products.

In conclusion, the most important instructions bearing repeating for swimming in water covered with burning oil, gasoline, benzene, or other liquid are:

1. Keep on all light clothes.
2. Dive into the water from the windward side of the ship.
3. Use breast stroke with short arm pull.
4. Swim as far under water as possible before coming to the surface.
5. Before coming to the surface, start thrashing arms in a circular motion, to break the surface and clear space for fresh air free of vapor.
6. After gaining breath, start a second lap under water or start swimming with head up, using breast stroke, on the surface.
7. Look around for shipmates to stay with and find wreckage to use as a support or float; any piece of lumber or crating will buoy a person and conserve strength that may mean the difference between being saved and lost.
8. Keep cool and stick together.
9. Swim easily with the idea in mind to swim six or eight hours without tiring."

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