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Kuchkin K., Korzun O.  
**Ice Aircraft Carrier**

Belarusian National Technical University  
Minsk, Belarus

In 1942, the situation on the Western front was catastrophic for Great Britain. British fleet had significant losses. Germany's powerful industry allowed the country to recover quickly after its losses, while Britain, having entered the war insufficiently prepared, took into account any, even the most insane ideas that could help it confront the enemy [1].

One of such ideas became the creation of the aircraft carrier made of glass. Ice as a construction material was considered as a temporary replacement for steel that was in great demand at that time. It is known that in 1942 this idea was discussed at high level in the United Kingdom, including the Prime Minister Winston Churchill.

Two ways of the creation of an aircraft carrier from ice were developed at the same time. The first - the cheapest - was to sawn off the tip of a large iceberg and convert its surface into a runway. It was assumed that such ships, very cheap in production, would be used for air operations against strategic enemy targets. Such an iceberg aircraft carrier was also supposed to be equipped with defense systems, residential compartments and an engine with control rudders. The time to use such a ship would be limited to several months.

The second way supposed the construction of an aircraft carrier from ice blocks, between which refrigeration

pipes would run, and that would allow the ship not to melt and perform its functions for a long time.

After a long discussion, the British Department of Defense chose the second option as the most promising. Jeffrey Pike was appointed project manager. Experimentally, he found that if you mix water with cellulose and then freeze, you could obtain ice that is superior in strength and does not melt for more time. The new material, which, as it turned out later, had even greater buoyancy, was decided to call "pykret." The American and Canadian allies were involved in the British project, and just in two months, the model of the ship was built and launched in Canada, where its tests began.

By 1943, the 18-meter vessel was successfully tested in summer conditions, but the English Admiralty had several questions to engineers: they asked to increase the strength of the deck to land heavy bombers and equip the vessel with additional protection against the torpedoes of German submarines. It was necessary to strengthen the metal frame of the ship, which resulted in additional cash, and time costs. The project no longer seemed a way out against Germany's superiority at sea, especially since by the end of 1943 the situation in the war became favorable to the Allies. Britain finally managed to overcome the shortage of steel and establish the production of cheap aircraft carrying ships. The unusual project was gradually forgotten and remained only in the form of drawings. The test copy of the ship soon melted, and only a metal skeleton frame was left.

#### References:

1. Winston Churchill [Electronic resource]. – Mode of access: <https://mydiscoveries.ru/winston-cherchill-hotel-postroit-avianosets-izo-lda>. – Date of access: 04.03.2021.